ETS

FYP

The story of 1

One pension platform
for all mobile workers
in Europe: FYP

Pilot Project Report

Building the European Tracking Service on Pensions

European
Commission

Imprint

Pilot Project Report

Building the European Tracking Service on Pensions

Project VP/2018/0392

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This project developed four elements to connect mobile citizens with their pensions

Introduction

Project Background

> **In 2018 the European Commission (EC) called for the** *"development of web-based cross-border pension tracking services that help mobile workers follow their pension rights accrued in different Member States and pension schemes in the course of their career"* **(EC call for proposals). A consortium of European pension stakeholders took up the challenge of carrying out the EC's action towards the development of the pilot stage of a European Tracking Service (ETS) on Pensions for the following three years.**

The ETS project builds up on the results of the earlier Track and Trace Your Pension in Europe (TTYPE) initiative. The TTYPE project ran from 2013 to 2016 and served as a feasibility study on the possible design, business plan and policy recommendations for a European pension tracking service.

For the past three years, the project was building the pilot under the already exist- ing brand www.FindyourPension.eu (FYP) – a website which has been supporting mobile researchers in dealing with their various pension claims since 2011. As of February 2022, the ETS project consortium is in the process of finalizing the pilot stage of the ETS project.

In its first phase, the ETS Pilot was aimed at offering general information on pension landscapes in a wide range of European countries and assisting mobile workers in finding their pension providers in at least five member states (MS). Following a step-by-step approach, the ultimate goal to be achieved through the following project stage is to roll out the service and connect as many national tracking services (NTSs) and pension providers as possible to the platform.

Policy context

Given the persisting gaps in the access to information on individual pension entitle- ments, which create obstacles for the transparency and pension coverage for mobile workers, an ETS has the potential to become an important element for the facilitation of cross-border mobility in Europe. In addition, the development of a pension track- ing service for individuals is considered a key step towards protecting the rights of mobile workers and for improving future pension adequacy and sustainability.

In that sense, the ETS project's targeted impacts are relevant to a wide range policy development at the European level, including broad initiatives on social protection, pensions, the completion of the capital markets union and labour mobility, including those targeting workers in non-standard forms of employment. Within this context, for its 3 years of operation, the project has faced a rapidly changing policy environ- ment and an evolving European pension market.

One of the important policy developments linked directly to the core purpose and objectives of the ETS project is the implementation of the **European Pillar of Social Rights**. As part of this initiative, in November 2019, the European Council adopted its **Recommendation on access to social protection for workers and the self-employed**, where the effective provision and preservation of social security rights, including pensions, was highlighted as a priority. Specifically, Council Recommendation 15 referring to transparency in the provision of social protection states that: *"Member States are recommended to ensure that the conditions and rules for all social protection schemes are transparent and that individuals have access to updated, comprehensive, acces- sible, user-friendly and clearly understandable information about their individual entitle- ments and obligations free of charge."* Recital 22 of the Recommendation further estab- lishes that: *"Digitalisation can, in particular, contribute to improving transparency for individuals."* From the perspective of the project consortium, the ETS is well posi- tioned to contribute to the realization of Council Recommendation at national level, as it focuses particularly on the development of a digital service for improving access to information on pension rights for mobile workers.

In addition, as part of **the new Action Plan on the implementation of the European Pillar of Social Rights**[1],launched by the EC after an extensive public consultation in March 2021, it was recognized that *"Innovative solutions, notably digital ones, can facil- itate the physical and virtual mobility of citizens, support the portability of social security rights and the cross-border verification of social security coverage by administrations, and address challenges in the identification of people for social security coordination purposes"* (p.30). Being highly relevant to this context, the successful realization of the mission and vision of the project and the implementation of the full roll-out stage of the ETS, will support the further integration of the European labour market, facilitating an improved access to social protection.

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1   Action Plan European Pillar of Social Rights, available here

The functional ETS will be especially beneficial to the operation of all pension providers (statutory, occupational, and personal pensions) as the platform will aim to provide information on individual pension entitlements per pension pillar, which is currently not possible in the case of workers who are no longer residents but have previously accrued pension rights in a European MSs. The improved access to information and the identification of past and current pension systems of affiliation will help in the acquisition and preservation of pension rights for mobile workers and will improve the overall operation of the European pension systems. These aspects of its operation make the project relevant for several legislative initiatives which are foreseen or in the process of implementation, including the **IORP II Directive**[2], adopted in 2016 and **the updated rules on the coordination of social security systems**.

Within this context, the ETS will be especially relevant and will facilitate the compliance with the provisions of the *so-called* **Portability Directive**[3]3, which lays down the rules for effective preservation of supplementary pension and ensures adequate information, especially on the impact of mobility on individual pension rights. In its report on the application of the Portability Directive[4] published in July 2020, the EC referred specifically to the ETS Project in the context of the observed implementa- tion of information requirements as part of the Directive's application at national level (p.12). In that sense, the ETS will be also beneficial **for ensuring the protection of the pension rights of mobile workers**.

The ETS will support the process of **modernization and digitalization of social protection systems across Europe** through the provision of its digital service, providing structured information on pension benefits on a centralized European platform. This has the potential to substantially improve communication on pensions also at national level, which is a crucial factor towards future adequacy and sustainability of the MSs' pension systems.

This particular aspect was further recognized in June 2020 in the **final report**[5] **of the High-Level Forum (HLF) on the Capital Markets Union (CMU)**, which outlined a series of clear recommendations aimed at moving the EU's capital markets forward. In the final report, the HLF recommended that: "the Commission encourages the development of pension tracking systems for individuals" (p.22) in the context of improving future pension adequacy and sustainability (p.32).

As a result of the HLF's report an important development came in July 2021, when the **European Insurance and Occupational Pensions Authority (EIOPA) published its consultation paper on a technical advice on national pension tracking services**.

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2   See recital (19)

3   Directive 2014/50/EU on minimum requirements for enhancing worker mobility between Member States by improving the acquisition and preservation of supplementary pension rights

4   Report from the Commission on the application of Directive 2014/50/EU on minimum requirements for enhancing worker mobility between Member States by improving the acquisition and preservation of supplementary pension rights, available here.

5   Final Report of the High-Level Forum on the Capital Markets Union capital markets, available here.

Following a call for advice from the European Commission, the Authority aimed at providing impartial advice and good practices on technical matters for Member States that would like to set up a pension service. The ETS figured prominently in the recently published consultation paper e.g., with regard to digital nudging and citizens' engagement, EIOPA promoted the practices brought forward by the ETS. The newly designed pilot version of the ETS is shown as an excellent example of user experience customization by allowing the individual to compile a 'To-do list', but also by showcasing different personas and their representative life-situations. EIOPA also highlights the importance of the ETS initiative overall, as it is perceived as an important enabler and precondition for mobile workers to be better informed and to exercise their social rights.

As an additional point, in a very recent development as of January 2022 the European Commission and the OECD's International Network on Financial Education published the joint **EU/OECD-INFE financial competence framework for adults**[6], as a concrete measure stemming from Action 7 of the 2020 Capital Markets Union Action Plan (*'Empowering citizens through financial literacy'*). This framework aims to improve individuals' financial skills and to enable them to make sound decisions regarding their personal finances. Hence, it has as a main goal to support the development of public policies, financial literacy programmes and educational materials through the involvement of Member States, educational institutions and the industry.

The EU/OECD-INFE framework highlights retirement as an important area for the financial education of adults and describes several key aspects for tackling the issue of raising awareness. The aim is that the individual understands the importance of ensuring financial security in old age and the need to start saving for retirement as early as possible. At the same time, the individual should be familiar with the different pension pillars and have a good understanding of the different options for building retirement savings. This will help people to make informed choices based on the combination of their different pension schemes as well as to make plans through-out their career paths which will ensure an adequate retirement income in the long- term. The ETS project is designed with this overarching goal, thus being an impor- tant tool for the retirement awareness and planning for EU citizens.

Considering this outline of the relevant policy developments and with a view of the next steps in the development of the ETS, the consortium considers that there is a high level of complementarity between the objectives of the project and the objectives of the existing policy framework at the EU level in the context of social protections and specifically, pension provision.

The following sections of this report include a detailed overview of the next key steps towards the realization of the strategic vision and mission of the ETS project and the full ETS roll out.

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6   For more information here.

Our approach

The starting point of the ETS project was the detailed formulation of a mission and vision statement, defined and enforced by all consortium partners, as described below:

What is our vision?
All residents in European countries should have access to information on their pension entitlements no matter where they were acquired within Europe and regardless of their country of residence.

The ETS project's perspective is: Without information, no insight, without insight no informed decisions.

What does that mean for us?
Our mission is to create the means for people to get an overview of the pension entitlements they have acquired across Europe and to give them tailored as well as personal information on their European pensions. We also aim to support pension tracking services and pension providers in providing targeted communicating towards their participants (or finding them).

The ETS project's perspective: The information related to mobile workers is often available as providers focus on their citizens and not the provision of information towards mobile workers. In any case, the information needs to be aggregated and made accessible to both citizens and mobile workers.

How is our mission realized?
- We aim to create awareness and get engagement for our mission from the European pension sector (including governments) by providing information on the project, support the creation of national tracking services,www make NTSs and providers connect to the ETS, etc.

- We will create an infrastructure for the collection of personal pension information (from all relevant European pension providers) so that the information becomes accessible.

- We will create a platform that provides tailored information (to the needs of the user) on pensions across the European countries as well as personalized information on pension entitlements.

The end-users of the ETS are mobile workers currently working, having earlier lived and/or worked abroad or those considering going abroad (ETS Proposal, page 62).

In order to implement the defined mission and mission of the ETS project, the consortium structured the project execution across four interrelated work streams, where the lead partner, the Versorgungsanstalt des Bundes und der Länder (VBL),

provides the project coordination and mainly works on the implementation of the pilot ETS (content provision and process, platform building). All partners are repre- sented in the project steering group and cooperate in one or more of the ETS work streams described below:

- **WS1.** Implementation of the Pilot European Tracking Service (ETS), design and functionalities, information input, pension landscapes, technical part.

- **WS2.** Connection concept (Proof of concept level 2, data processing, authentication and General Data Protection Regulation (GDPR)).

- **WS2.** Full roll-out concept (report) and additional functions (also technical requirements.

- **WS3.** Establishing a management organization for the European Tracking Service (ETS), legal conditions, requirements, contracts.

- **WS4**. Communication strategy and activities, aiming at raising awareness, mobilizing relevant stakeholders, and striving for broad interest and buy in.

The story of

10 million

Connecting all mobile workers in Europe with ETS featuring FYP

1. WS 1: Development of the PILOT website

> **To realize and implement the ETS different components have to be delivered. We distinguish between the website part and the technical implementation of the necessary connection to access personal data from national data sources, mainly the National Tracking Services. From the customer perspective it will, of course, be one service offering different customer journeys for different needs.**

The subproject "Pilot" had the task to set up the technical website, work out a concept for holistic (cross pillar) and cross-country content creation as well as edit the content for the first countries together with country editors.

The conception and implementation of the pilot has built upon the functionalities and experiences of the former FindyourPension.eu, a website which has been sup- porting mobile researchers in dealing with their various different pension claims since 2011. The newly created ETS pilot website will continue the former brand and

name "FindyourPension". When launching the technical website in June 2021, parts of the content (data and texts) of the past FYP were transferred to the new website. According to the proposed phased approach by setting up different functionality or ambition levels step by step, the ETS pilot has developed and implemented the first steps and functionalities of the ETS, 'Level1'[7] and 'level2'[8].

1.1. Methodology of drafting a concept for the FYP content design

The basic idea of the ETS is to support mobile workers in assessing their pension sit- uation so that they can take actions upon that information. Information on pension topics is broadly provided but the target group of mobile workers often do not have access to it. This applies not only in lingual matters but also in matters of understand- ability or even technical access. To improve the understandability of such informa- tion, targeted and tailored content is needed. In recent years a lot of research was undertaken in the field of pension or financial literacy. Nevertheless, mobile workers are different from the usual addressees of national services. Regarding tailoring the pension information for mobile workers, the project aimed to designing the pension landscapes on an evidence-based and custom- er-oriented approach.

Therefore, first work of WS1 was to define and explore the target group, their specific needs and pain points to draft a methodology on con- tent creation. All this work was accompanied by scientific advice through Prof. Lisa Brüggen from the university of Maastricht.[9] Results were presented at our webinars on pension commu- nication and the ETS event provided during the European Retirement Week[10].

One of the tasks undertaken in an agile approach together with the workstream members, was to define personas to derive use cases later from them for the technical development of the website. A first source of infor- mation to define the target group and understand the perspective and characteristics

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7   Level 1 functionality provides general pension information on different countries and systems as well as guiding participants to locate their possible pension providers.

8   At the same time the project will create the first connection to the Belgian PTS as a Proof of Concept in order to prepare the Level 2 functionality which shows personal pension information.

9   Single elements of the consultation work: Conduction and evaluation of a communication survey, develop interview format for professionals consulting the target group, work on the concept elements, review of text examples, content guideline.

10   More details on the work can be found in our newsletter and event reports retrievable on the FYP website as well as in the final report of the project.

is the annual EU-intra labour report[11] which provides updated information on labour-mobility trends in the EU and EFTA countries. The analysis covers the mobility of all working age citizens (20- 64 years) as well as the mobility of those who are active (employed and unemployed). The report also looks at indicators of economic integration of mobile citizens, such as employment /unemployment rates and occupations. The EU-intra labour mobility report 2018 states that EU-28 movers were frequently employed in construction, accommodation and food service activities (10% each)[12]. Due to already existing evaluation of construction sector workers by the cooperating Soka-Bau, a former partner in the TTYPE project, the first persona was drafted out of this sector.

Another important group mentioned are workers in the health sector since healthcare, long-term care professionals and live-in care workers often pursue their careers in countries other than their countries of origin. Due to the aging population and the already existing shortage of medical staff in many European countries the increas- ing demand is likely to lead to increase the professional mobility across the EU/EEA.[13]

According to recent developments an increasing tendency towards highly skilled working groups of movers (i.e., those requiring a ter- tiary degree or further qualifications) can be observed, and slightly fewer in elementary or manual work, which is one reason why we picked a representative of that specific group as one of the FYP personas. One important subgroup of the highly skilled working groups originates in science and engineering.[14] Due to the previous project, in which the ETS Project team members could already gain experience in the work with mobile researchers, it was decided to create a persona from this sector in addition.

To conclude, sectors to represent large groups of mobile workers as well as different understandings and perspectives were chosen to create our personas:

* Construction/manufacturing
* Health
* Research

11   The actual EU Intra-labour mobility report used was the one from 2018, retrieved on 15/01/2021
     https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8242&furtherPubs=yes.
12   EU Intra-labour mobility report 2018, retrieved on 27/10/2021
13   EU Intra-labour mobility report 2018, retrieved on 27/10/2021
14   EU Intra-labour mobility report 2018, retrieved on 27/10/2021

Thereby, it's also possible to cover different levels of education as well as prior knowledge and understanding of pensions on the ETS website. On the basis of the personas, customer journeys were designed: What are their problems/obstacles and. questions the personas are facing concerning old-age in different life-stages? What are the solutions we could offer? Customer journeys are a visual representation of the process a persona or a mobile worker goes through when needing information on pensions. Specific touch- and pain points are taken into consideration in order to design so called "guided tours", leading users to the information they need in order to answer their specific needs.

In order to determine the pain points and the most frequently asked questions, interviews with people who are in direct contact with the different personas and mobile workers were conducted.[15] In order to evaluate whether the question and pain points we crystallized are the same in other countries, a standard interview format has been developed with which these needs can be identified. In the agile and iterative approach used for the development, the content team started the work with setting up contents of pension information from 2 example countries (Germany and Sweden) to be used for the edition of the ETS content guideline.

1.2.　　　Functionalities and concept of the pilot

Following the predefined ambition levels, the information to be presented on the ETS/FYP website is seen as general information meaning it does not contain personal data from pension providers or national authorities. In the project work, we have developed an approach that is named tailored information meaning that the users find information that suits to their personal situations and needs. In order achieve this goal we have created the guided tour functionality allowing users to find information quicker and more targeted to specific personal features like age, profession, life events etc.. in the EIOPA advice on Pension Tracking the ETS approach was mentioned as good practise form of customization of information. The overall motto of the information concept is "Find, inform and activate". This means that the website supports the user in Finding important questions to be answered, retrieve and understand the information and gets activated to take care of the pension situation.

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15　　For the construction sector research and experiences from Soka-Bau could be used. For the health sector, the persona of the "nurse", we have been in contact with different HR departments of the hospitals and a representative from a professional association as well as people in charge of questions related to pension rights (e.g., Charité, University Clinic Freiburg). As mentioned already, for the researcher, the VBL team can make use of the experience gained with more than 2000 researchers participating at consultations and events provided by the FYP team.

To put this motto into practise, the first edition of the website offers three different functionalities:

1. Structured and tailored pension information targeted to mobile workers from different professions, educational levels and life situations. In addition, the pension landscapes section provides users with an overview as well as background information on the national system of pension provision country per country. A pension landscape in the ETS context is the pension system of a country comprising all sources of old-age pension, namely: Statutory pension, occupational pension and personal pension. The information is split according to three sources.

2. **The pension compass – find your provider**
   This functionality guides participants to locate possible pension providers from different countries by using questions and answers entered by the users. The user can find their pension providers this way, getting contacts as well as information on providers presented. This functionality will be necessary for countries without a working NTS, respectively, as long as NTSs are not connected.

3. **My Dashboard/ personal account**
   Personal area after logging in to save the personal overview via a dashboard design including the personal pension provider list, overview on entitlements via a self-track option and later on the data of connected data sources as well a to-do list created during the guided tour.
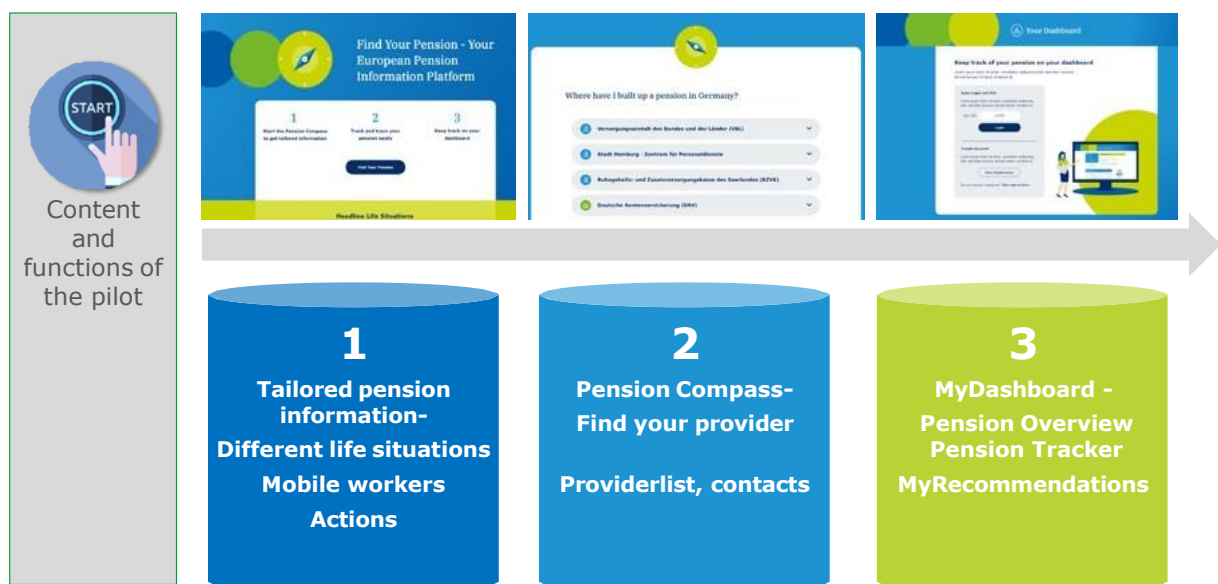

Figure 1: The website's three different functionalities.

1.3.   Tailored information design

The purpose of a guided tour is to shape the pension information according to the user's needs. Therefore, the search should be designed as comfortable as possible to motivate the user to continue the search until all the questions are answered. The users are guided through the content with the help of a predefined questions – answer system based on their pension information needs. The result depends on the choices the user made during the guided tour. The information guided tours are centred on key questions that mobile workers have which were identified based on user journeys from mobile workers as well as evidence-based insights from qualitative interviews.

The information of the guided tour is designed according to the following approach: In general, the guided tour will be accessible from different entry points:

- Young and starting career
- Family and pension
- Generation 50plus

The guided tours start after the user has chosen the one of the entry points for life situations or the pension compass.

Figure 2: Selection of a life situation.

Key topics for the entry point: Young and starting career.
After users have selected the entry point "life situations", they can select from several key topics we have identified as most interesting topics for the respective age group. The information is shaped according to the selected entry point respectively target group.

- Pension provision: How does it protect and accompany me through my life?
- What happens with my pensions when I move across Europe?
- What happens when I am ill or can't work anymore?
- How do I increase my pension?
- Family & pension

Key question

After the user has selected the key topic, a key question can be selected. The key questions differ from key topic to key topic depending on the key topic which was chosen.

Entry point

Key topic

Pension provision: How does it protect and accompany me through my life?

Key question

- What are the components of old-age provision in Germany?
- When am I insured in the German state pension scheme?
- What is occupational pension provision and when do I have it?
- What benefits does the German state pension scheme provide?
- What can i do to ensure financial well-being in my old ages?

Figure 3: Getting from the entry point to the key questions.

The information is always shaped in specific manner to ensure comprehensibility: Examples include a short description of the pension system of a country, the main factors that contribute to the height of the pension income, or how the different pillars relate to each other.

What are the components of old-age provision in Germany?

To get to know your opportunities, it is important to understand how the German pension landscape looks like. It is composed of 3 different elements to build up pension for the old-ages.

#1 State pension insurance ⌄

#2 Occupational pension provision via your employer ⌄

#3 Private savings for the old-age using different products ⌄

Good To Know

1. Occupational and private old-age provision are becoming increasingly important in order to be able to maintain the standard of living in old age.

Figure 4: First layer example.
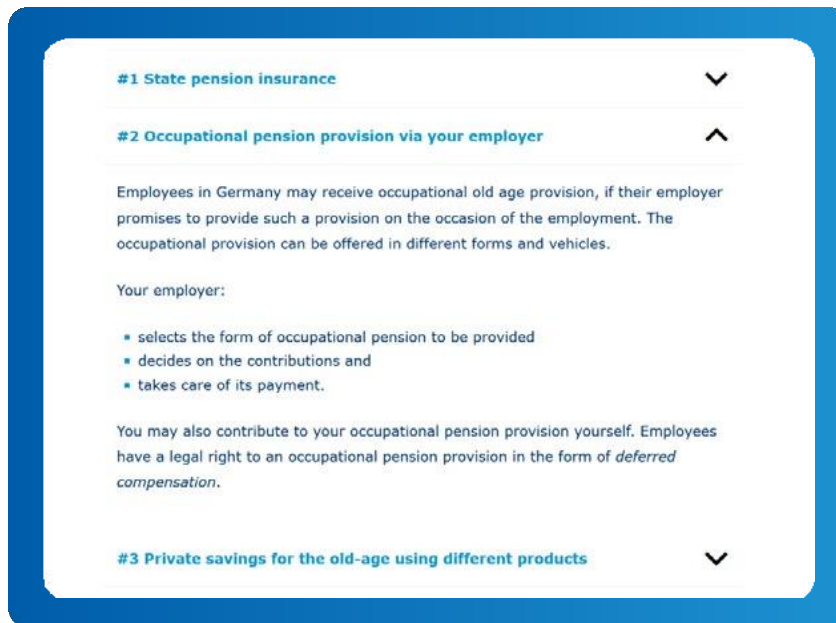
Figure 5: Second layer example

1.4. "FindyourProvider" – Pension Compass

Through the "Find your Provider" functionality, users are guided to identify providers that they have been affiliated with. The past and current pension affiliations are identified through questions on employment status, sectors, branches, liberal professions, and regional or multinational companies. At the end of the search per country, users receive an overview of a number of institutions they have probably been affiliated with. It has to be underlined here that the pension compass can be used where no connections to national tracking systems can be built. The completeness as well as the number of providers included depends on the composition of the single landscapes but on the expectation to have a connection with the NTS soon as well. Therefore, in the case of Belgium, the compass will mainly include the state pension providers and direct the user to the pension tracker to find and retrieve their individual pension overview.

Directing the user to a national tracking system not connected to the ETS would only make sense if non-national and non-residing users will have technical access to the NTS. Links to NTSs and the requirements to be used are already contained in the section called pension landscapes in FYP.

Each compass tour is ended by a recommendation which encourages the user to per- form a specific action. The recommendations are diverse in nature and can be gen- eral or provider specific.
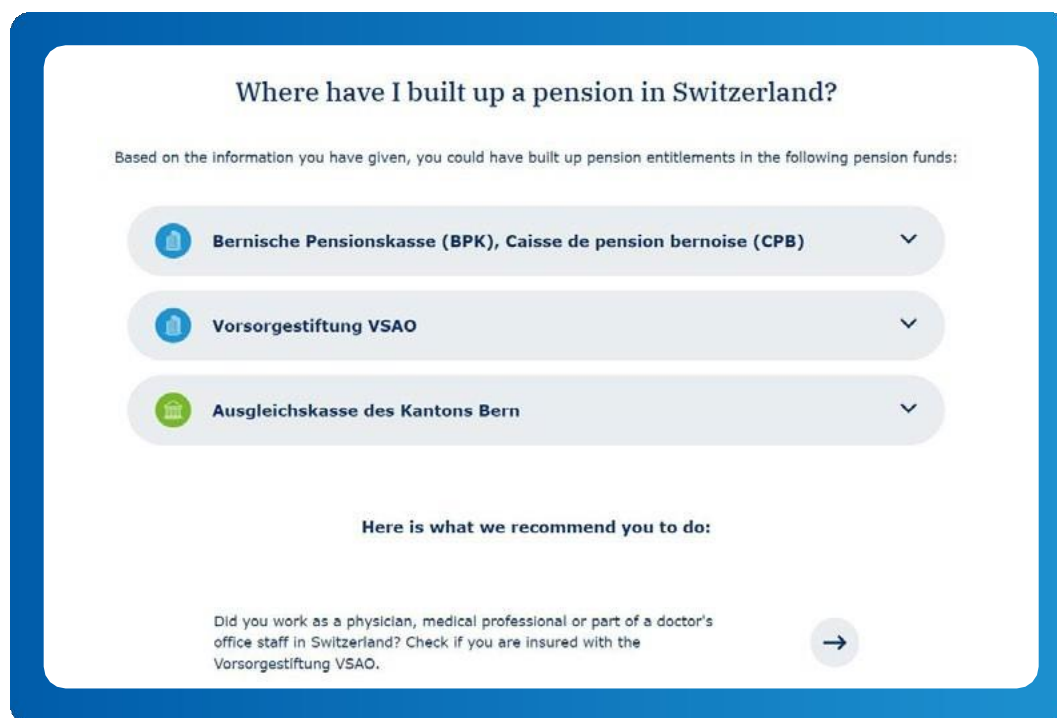
Figure 6: Pension compass example from Switzerland.

1.5.　　　　M Dashboard

The dashboard feature includes two main functionalities, namely:

- the "Pension overview" and
- the "Recommendations".

The Dashboard is accessible via the landing page and the menu. In order to access the dashboard, the user has to login with the pincode or create a personal account. After login the user can chose between the functionalities mentioned above.

The pension overview has different features

- Saving all pension providers and institutions users have been affiliated in the pension overview to keep track of their pension provision

- Add Provider: The user can get an overview of the individual pension claim/s in different countries by adding pension providers to the user's list. The provider can be found via a search function.

- My Payout: The feature allows to enter and add up the individual pension entitlements, separated and sorted to the different pension sources (state and occupational pension systems). In the explanation of this feature users are made aware that they need their annual pension statements to create their overview.

- Pension tracker: In a later phase, after connection of the PoC and later other data sources, the pension tracker functionality will enable the user to access the personal pension information. The first country available will be Belgium.

Creating a Pension overview

If the user clicks the "Add Provider" button the search for the relevant pension institutions starts. The filtering function can be used to search by country or source. When the user has found the provider he or she has been searching for it can be saved on the Pension overview by clicking on desk symbol. This way the user can create a provider list.

Figure 7: The relevant pension institutions if the user clicks the "Add Provider" button.

My Payout functionality

After the users have found the pension provider with the help of the add provider functionality, they can enter some information to be taken from pension statements received. The tool shall activate users to get in touch with providers to ask for statements or to work with information they find there. This functionality will have to be extended in the next phase. E.g., we are considering more wallet options to create one's own pension folder.

Figure 8: Add provider – activating users with my payout functionality

The My Payout functionality serves as an interim solution until the Pension tracker is available. Additionally, the functionality can be of use for countries which do not have an NTS. It is considered that how the pension is paid out, the pensionable age etc. may vary from member state to member state. Additionally, it is pointed out on the website that pensions can be paid in different forms, such as an annuity, monthly or annually, but also as a once and for all or lump sum payment.

Recommendation

This action starts at the end of a the FindyourProvider guided tour. After the users have finished the guided tour they will be offered recommendations. Short information is accompanied by proposals for recommended actions that can be added to a to-do list and saved in the user's personal Dashboard on the website. The so-called 'recommendations' can serve as reminders, be ticked off and deleted after the tasks have been completed. The Recommendations aim to activate the user to do something.

The user starts by clicking on the Pension Compass. Saving the recommendations, the user automatically receives a clickable action list which can be saved on „ your profile". The recommendations can be deleted once the action is completed!

Figure 9: A recommendation example.

1.6. Website communication concept

To make sure that pension information and landscapes are always up-to-date and accurate, the FYP portal is based on a content management system which will be maintained by editors from different countries. Part of the pilot work stream is therefore a so-called ETS content guideline, settling and documenting the design and process of content provision. Here, the different pension concepts of the European states are recognized and best practises of pension providers of all pillars will be taken into account. The FYP portal is based on a content management system TYPO 3 CMS (version 10.4). The CMS programme allows to create, edit and organize various content without prior formatting. In addition, the CMS can be used by editors with hardly any knowledge of common programming languages and therefore supports the ETS publication process.

a. Editorial process

The goals of the ETS project is to have pension information on a range of countries accessible on the FYP Website. To accomplish this ambitious goal, the CMS supports to build a network of different editors in the frame of a clearly described editorial process. The latter is technically established using different roles and rights established in the CMS.

In a first step, country editors will be asked to provide pension information on the respective country. To simplify the process for the editors the ETS project team will provide templates which show the way the information is supposed to be drafted when it comes to structures and language use. The editors can either fill in the templates and send them to the ETS editorial team or put the information directly into

the backend of the CMS. Before the information is published on the frontend it will be forwarded to the content manager. If requested by the country editor, the information can be checked again. The final check-up and publishing will be done by the chief editors.

Figure 10: ETS communication – editorial process.

b.   Content Guideline – principles for a clear communication

In addition to setting and documenting the design and process of content provision, the content guideline also ensures compliance with the communication standards of the ETS. The content guideline sets out rules for language use and structure for all content which is put on the website (Layering, Recommendation, Good to know). The process of development of the content guideline is accompanied by Prof. Dr. Lisa Brüggen.

Concept framework

An important precondition to write content for mobile workers is to be aware of the fact that "pension" has different meanings even in a national context. Pension can refer to a form of deserved rest, a form of insurance, etc. This is even more the case in a European context. That is why we encourage the editors of the website to take a walk in the mobile workers shoes and be aware that the mobile worker might have a different understanding of pension.

The term "concept framework" was first used by Prof. Yves Stevens from the KU Leuven who did a lot of research regarding pension communication in the last decade. He gave some input to the project from his work and presented his findings during the ETS kick-off event as well as at the first webinar on pension communication held at the beginning of July 2020.

The concept framework serves as a kind of "construction manual" for future editors and guides them through the whole process.

Example of editor instructions:

- Make yourself aware of the different perceptions described above.
- Explain the basics of your country's pension concept in the section of the pension landscapes and repeat it in the guided tour where it helps the user to understand the context.
- When answering the questions in the life situation guided tours: Distinguish between the pillars and try to cover the holistic perspective as far as possible. However, do not overload the users with too detailed information.
- • Always try to give a holistic overview and do not cover only your own scheme.

End with a concrete recommendation for the users' action lists where possible.

A **pension** can refer to…

- A form of deserved rest
- A compensation for the physical impossibility to work any longer
- A part of the wage structure
- A deferred remuneration
- A reward for services paid to the country
- A form of savings
- A form of property
- A form of individual or collective life insurance
- A form of social insurance
- A form of shared citizenship

Is there need for a different kind of **communication**?

- Different answers are possible.
- Not only about financial iteracy or the complexity of pensions.

For ETS

In a European context it is probably even-more important to understand the underlying pension concepts in order to understand the needs for communication.

Some pensions are part of a classical welfare state and others are part of the liberal market economy.

There is nothing wrong with that but it might require a different communication approach.

Figure 11: Impact of different underlying "pension"-concepts on the user's understanding.

1.7.   Consideration for a functional upgrade of the FYP portal

Apart from the tailored but general information provided on the FYP website, the long-term goal of the ETS is presenting the personal pension overview. As already mentioned above an integrated customer journey combining the two main function- alities information and personal data as well as improving the pension dashboard functionality should be developed during the next phase. Furthermore, several other features could be added and the multi-lingual concept has to be implemented as described below.

1.7.1.   Linking pension data with tailored information

Recent work of WS1 and WS2a dealt with the questions how the personal pension data stemming from national Pension Tracking Systems (PTS) can be contextualised by connecting them with the tailored and general information presented on the web- site. Therefore, a technical combination of POC and the FindyourPension website to offer users the optimal journey will be needed.

Assuming that more PTSs will be connected to the ETS, the user will have the pos- sibility to retrieve personal pension data from different countries, consisting of the information transmitted by Pension tracking facilities and will receive pension infor- mation related to the data. The FYP website invites its users to create their pension overview using the dashboard feature. WS1 intends to include the personal pension information on the Dashboard. While the discussion and work on a European data model continues, the next version of an extended dashboard is intended for the next phase.

In order to illustrate this approach, we again introduce one of the personas named Andrej.

Andrej is Polish, 52 years old, married to his wife Zuzanna and has three children. Zuzanna is working fulltime as well while her mother is taking care of the kids. To support his fam- ily Andrej has worked in Sweden, Germany and Belgium, Netherlands and Austria. He sometimes lives in temporary accommodations, changes his employers often. For a few times he even had to move completely and live abroad for a few months. **As he is getting closer to his retirement he is starting to wonder where his pension will come from and where he has to apply for his pension.**

The first step to help Andrej with his questions would be to access the pension tracker and search for the relevant pension data.

After Andrej has received his pension data from the ETS pension tracker there are still questions open. As he has lived in different countries he will receive an overview of the entitlements gathered from Germany, Belgium, Austria, Sweden and the Netherlands. However, what he does not know, is, how he is supposed to apply for his pension and where. Experiences from the previous FYP pro- ject have shown that mobile workers often lack knowledge when it comes to their pension.

Therefore, there is a need for further literacy on the topic, in particular because of the diversity of pension systems in Europe. Many believe that there is one big European pension which will be paid out at the end of the career.

The ETS website does provide the required knowledge to understand the pension data. However, it is important to link the presentation of data with this targeted pension information in order to make sure the data is understood properly. There are different technical solutions for this purpose which would be implemented on the website in different phases. One is an easy and faster solution and one needing more efforts or technical changes. Hence, we describe two scenarios: A short-term scenario which approaches the question with the technical availabilities already in place and a longer-term scenario to be implemented in the next phase.

a.   Short – term scenario: Linking the pension overview with the pension landscapes

To ensure that the mobile worker understands the context of the given pension information we suggest to link the pension information given in the pension overview with the pension landscape of the country were the pension entitlements were acquired. The same applies with other parts of the pension overview which can be linked to parts of the guided tour or a content side on European Coordination.

b.   Mid- term scenario

The CMS developed, in principle, is able to recognize certain attributes that characterize the userduring the customer journey and build a user profile (like a ware basket functionality) and offer him or her content according to his or her age, the number of providers and countries where the user acquired entitlements compiled in the his or her dashboard. The age is requested when the user registers to the

dashboard and the other two attributes are based on his or her search and answers in the guided tour as well as providers stored by the user. Other attributes are not required for the profiling at this stage. The content data base can be restructured according to fixed attributes called "meta data". The present info texts used as first layer described in the content guideline can serve as 'Info text module level 1' and be presented as short introduction of topics related to the results of the user's pension overview. The system should be able to display selected texts e.g. in the "My Payouts" section according to the age the user shared, the number of providers and countries where the user acquired entitlements.

Linking "My Payouts" with pension information via the related topic section:

To ensure further understanding of the personal pension data, the information could be offered in the dashboard underneath the overview in a related topics section (see example below). However, to ensure that the user only receives relevant pen- sion information, the information will be further tailored to the individual's pension overview. The interests of Andrej for example who is about to retire will be different from those of a young person like Alice who has just started the career. We think it is important to meet the needs of the different costumer groups.

Using the example of Andrej, he is directed to a content side explaining the effects of European social coordination which will help him dealing with questions like "who will pay my pension some day!". Alice, on the other Hand, will be forwarded to a guided tour containing relevant information for a young person working mobile in Europe.

Figure 12: Integrations of Pension information in the dashboard – Example Andrej part 1

Once Andrej selects the information button (i) shown in the figure above, he will be lead to a list of questions which are relevant for him. The questions presented to him are selected according to the age he shared, the number of providers and countries where he acquired entitlements. The screen will move to the position below the pro- vider list as presented in the figure below.
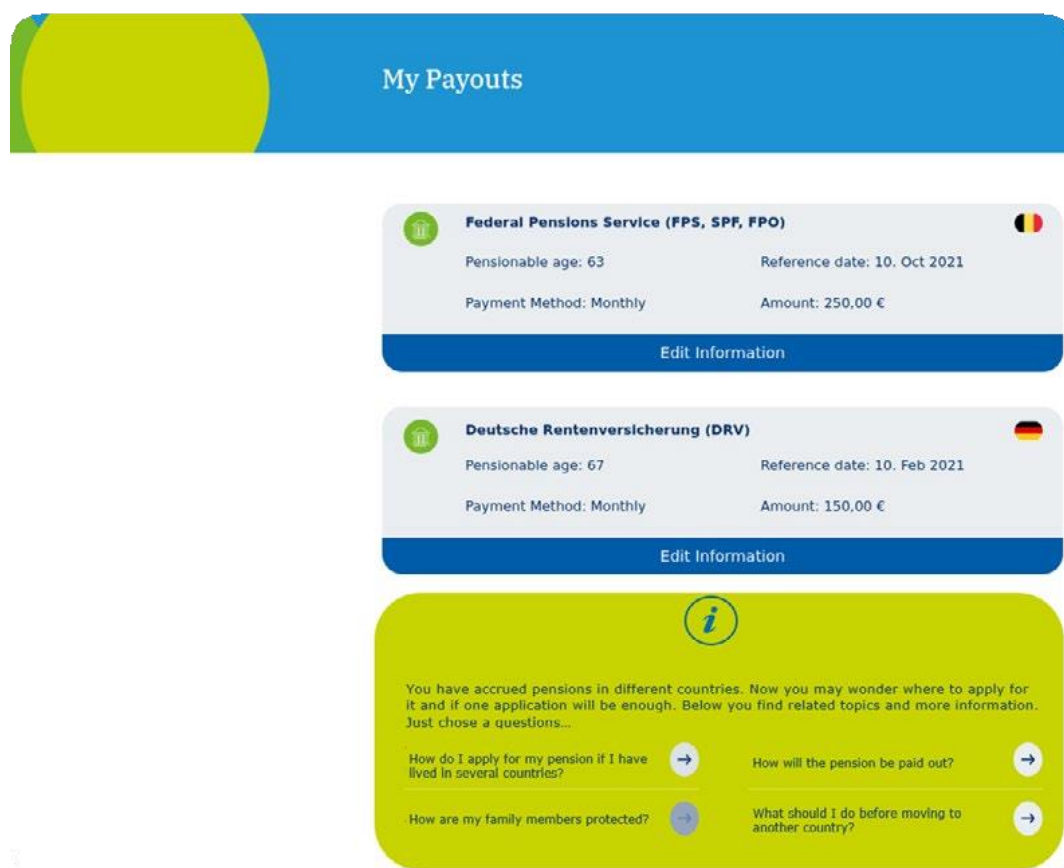
Figure 13: Integrations of Pension information in the dashboard – Example Andrej part 2

1.7.2.   Technical and functional development – next steps

The CMS chosen as basis for the website development is named TYPO3.

Open source software such as TYPO3 offers distinct advantages over commercial in-house or third-party alternatives, including cost savings, flexibility and the latest technological innovations. TYPO3 is established on the market as an enterprise content management system. In addition, it offers the flexibility of a framework that can be fully controlled and precisely tailored to the needs of an organisation. While the source code itself is freely available, an organisation can benefit 24/7 from the worldwide support, training and customisation capabilities of a service provider that cannot easily be replicated internally.

In addition to the upgrade described above it is absolutely necessary and planned to present the content in several languages. The concept foresees to produce the national content pages with the help of editors who are native speakers and create national language pages within the CMS TYPO3. For the presentation of the portal findyourpension.eu it is also essential that the language level is consistent and comprehensive across national borders.

To be able to implement the process of translations with little effort, a partially automated process is to be established that automatically translates existing texts

through the connection of an external translation service and inserts them into the CMS. Afterwards, these texts only need to be corrected and released by the authors, which also saves a considerable amount of time.

Therefore, the CMS TYPO3 will be extended by the capability to access an external translation service via an API. Existing texts can be sent to the service which then returns a corresponding translation.

Established services on the market are to be evaluated, for example eTranslate and deepL.

It is planned to consider the following criteria in the selection process:

- The provider provides a complete API
- The provider has the option of a glossary in which subject-specific translations can be stored individually
- The provider can ensure that a contextual reference is included within the translation and, if necessary, supported by an AI.
- Providers with 1:1 translations are to be excluded
- The API endpoints are protected by an authorization token.

1.8.   Issues and risks to monitor

Of course, editing the website as described encounters some issues and risks as all editorial work does. Therefore, it is vital to use and enlarge the network of the former FYP editors as well as the TTYPE network.

1 Finding partners who are willing and able to contribute content to the FYP Website
2 Ensure quality control in terms auf language use, structure and correctness of content.
3 Combination personal pension data and pension data – contextualisation of pension information.

The community building and buy-in shall take place in the so called "Forum on Pension Communication" which is part of our ideas and activities mentioned in the chapters below. Editorial trainings will be held and the content guideline will be explained, evaluated and updated frequently.

The story of 2

FPS and Sigedis built the first connection to the ETS

2.   **WS 2:** ETS Proof of Concept

2.1.   What did we implement?

> **In this section we will give a detailed description of the Proof of Concept (POC) of the Connect Concept. The POC of the connect concept envisages to visualize individual pension information, coming from national data sources, in a secured way to the end user via the Find Your Pension-portal.**

The work done is described from two different perspectives: first from a functional perspective focusing on the user journey of the end-user; second from a technical perspective focusing on what happens behind the screens on the level of the ETS and NTS. To conclude, we will also briefly give an overview of what an NTS has to do to onboard to FindYourPension.eu from a technical point of view.

The goal of this section is not to repeat the description given in the proposal but rather give insights on the effective definition and implementation of the POC, but also on where the POC differs of what is stated in the proposal.

Goal of the Proof of Concept of the Connect Concept

As stated in the Proposal, the proof of concept of the connect concept envisages to visualize individual pension information, coming from national data sources, in a secured way to the end user via the FYP-portal.
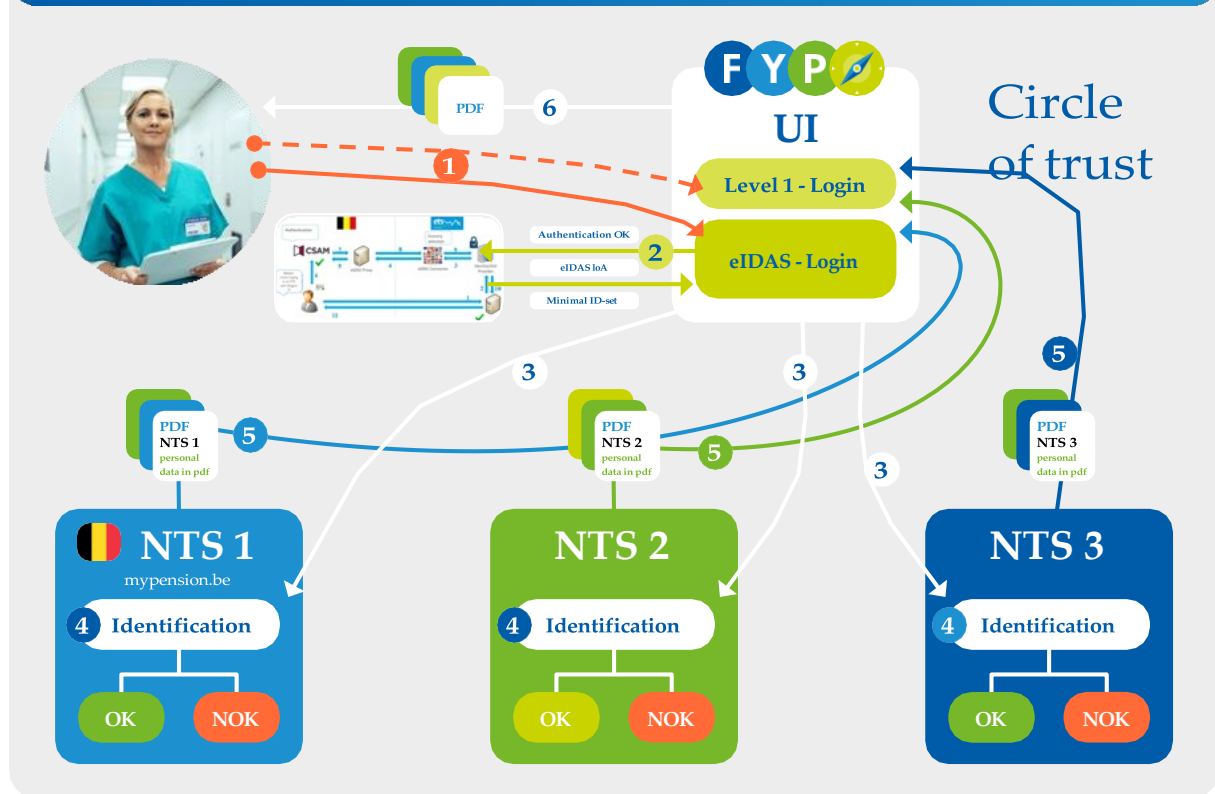
Figure 14: PoC goals

To guarantee a secured data exchange the connect functionality uses the **eIDAS-framework for authentication**. More concretely, the FYP-portal (re)uses the EU-eIDAS node – building block. This synergy ends the long-term challenge as already described in the TTYPE reports on how to authenticate users of ETS and guaranteeing that they are who they claim to be (this will be called here after their authenticated identity). As will become clear more in detail, one of the remaining challenges is the identification of the person in the national registers (i.e. the matching between an authenticated identity, on one hand, with the administrative identity, being the way, the user is known in the national register, on the other).

Since the ETS-functionality proofs its added value first and foremost in a context

1. where multiple data sources have to deliver information to answer the request of the user to find his pension, and

2. where this user has no access to a home NTS that delivers this functionality (as is today the case with all NTSs),

the proof of concept consists of setting up a central FYP/ETS – infrastructure that will connect to several (in the case of Belgium: two) data sources:

first, the Federal Pension Service who will deliver information on the Belgian statutory pension and

second, Sigedis who will deliver information on the Belgian occupational pension.

This set-up replicates -within one state - the test case of ETS connecting to two NTS'es.

2.2. User journey

Imagine a European worker, let's call her Alexia. Alexia has worked as a sales representative in several European countries, more specifically in Belgium and the Netherlands. Now that she is settled down in Germany, she wants to get a complete picture of her pension situation. But how will she manage to find all the information… On the Your Europe – portal she finds a link toward the FindyourPension-portal.

Eager to know more she starts scrolling the homepage for more information. On the homepage of the FYP-portal she finds a direct link towards the section 'Find my pen- sion in Europe'.

Find your pension information

Find your providers via the provider list
&
Find pension information for **Your Life Situation**

Start Pension Compass

Track and find your pension entitlement

Compile possible entitlements
&
Access connected services

Go to the pension tracker

Create your personal pension dashboard

Save your providers
&
Enter your expected pay-outs

Go to your dashboard

Figure 15: Homepage FindyourPension-Portal

On the homepage of the 'Find my pension' – functionality Alexia gets an overview of:

The different steps she has to follow to – in the end – find her pension
The countries that are already connected to ETS
The countries that will be soon connected to ETS

After reading the information, she knows that she will find in one click more information on her pension in Belgium, but not yet on her pension in the Netherlands and Germany. Curious to know more, she clicks on the Launch the Pension tracker.
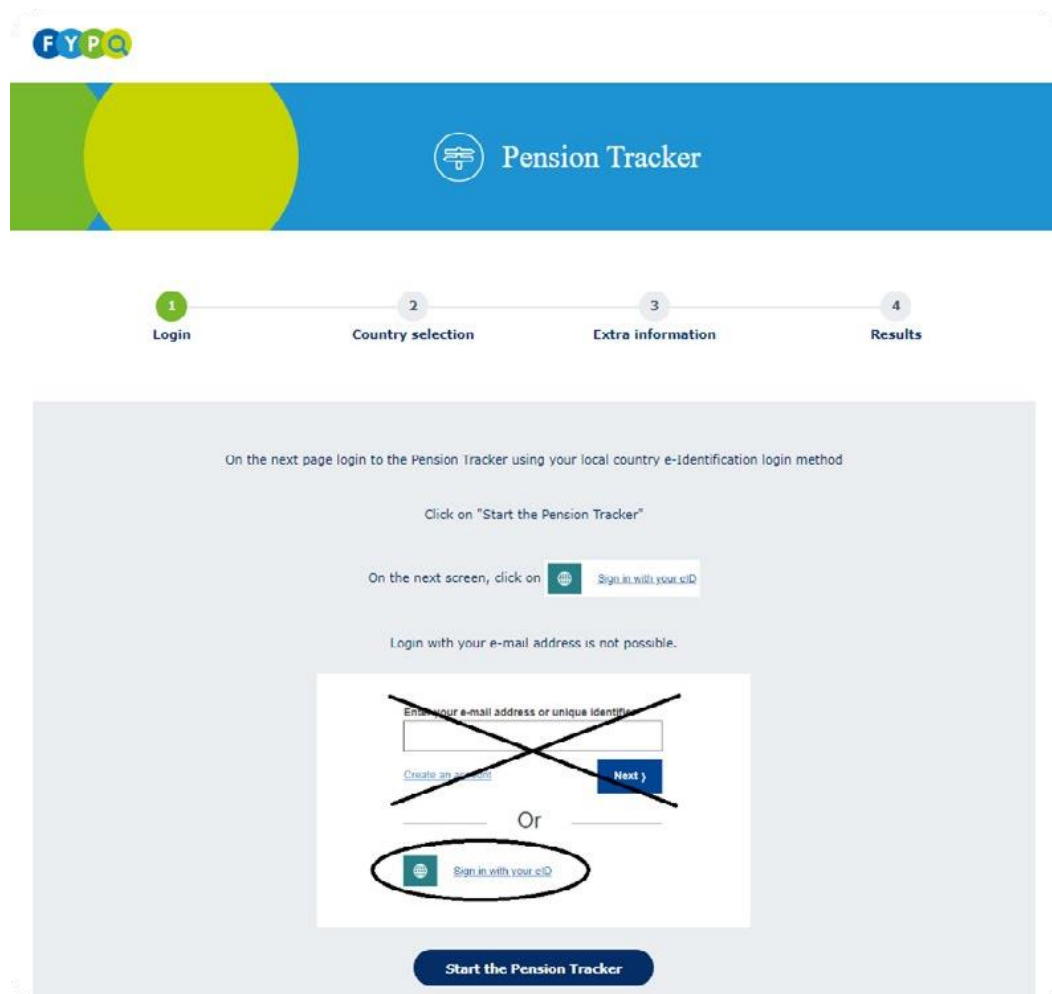
Figure 16: : eIDAS Onboarding

In a next step Alexia has to connect to the secured part of the FYP-portal via the eIDAS authentication module. After first choosing 'Sign in with your eID' (step 2) and second selecting the country which issued her identity card (step 3), in her case Germany, she is redirected to the German authentication page (step 4). From Alexia's point of view the authentication part of the process goes in the exact same way as if she wants to enter a German digital service.
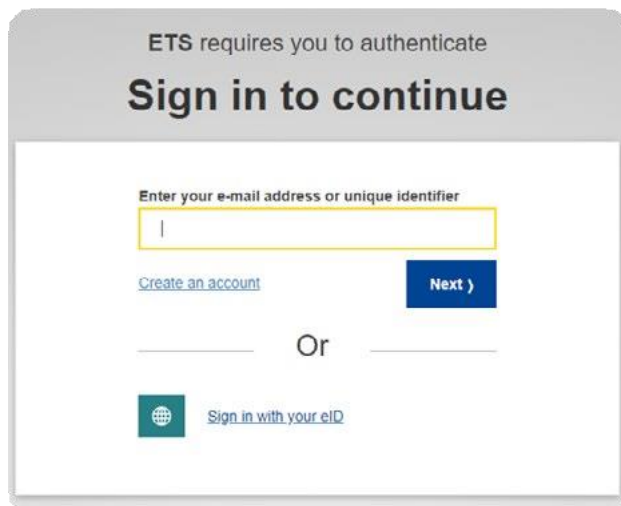
Figure 17: eIDAS start screen (2).
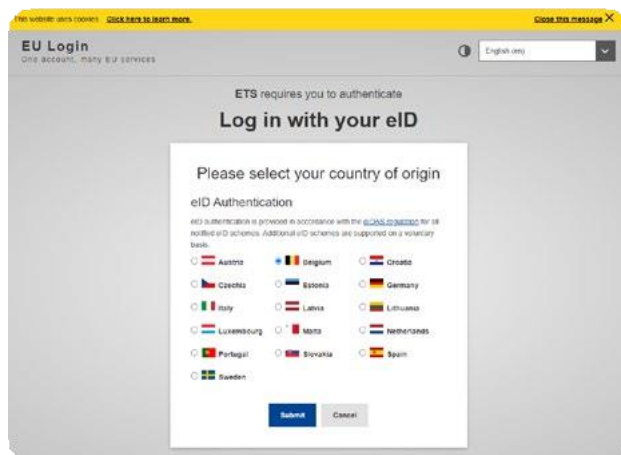
Figure 18: eIDAS country selection
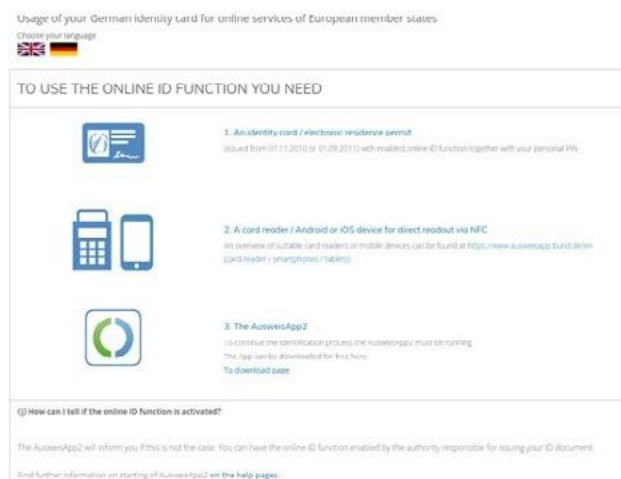
Figure 19: Authentication with German ID in German authentication module (4)

After succeeding to authenticate herself, Alexia will get in a following screen (step 5) an overview of the data on her identity that will be shared with the FYP-portal.

This doesn't concern Alexia but technically speaking we call this her eIDAS minimum identity (data)set, which consists of a unique eIDAS identifier, her first name, family name and date of birth. Countries could choose to share also the name of birth, place of birth, address and sex.

The transfer of data is only executed as she confirms it by clicking on the 'submit' button. With this action she consents with the data sharing.

Figure 20: Overview of identity data that will be shared with FYP-portal after consent (5).

Yes, Alexia managed to get into the secured part of the FYP-portal (step 6). But before she gets to her pension information in Europe, she needs to indicate in which coun- try she wants FYP to search for her pension (step 7)

Alexia (or you) maybe wonders why she has to indicate the countries where she wants FYP to search. This is to secure the performance of the 'find my pension' functionality and avoid unnecessary calls to the different national tracking services/data providers. She can however select all countries if she really has no idea of where she accumulated entitlements.

In a final step (step 8) Alexia is asked to add some extra information to facilitate her identification and finally make the search of her pension in the selected countries possible. More specifically, for Belgium she is asked to add her country and place of birth.

She has to explicitly consent with the sharing of her data with the data providers who will use it for identification purposes. She has also to agree with the saving of the data in her FYP-profile, so the information can be used to enhance her user experience if she visits the FYP-portal again in the future.

And finally, there it is: per country and data provider Alexia gets access to a PDF, in English, which resumes the pension information that is available for her by the data source. She can download the pdfs on her device.

my pension.be

Sender: FPS Tour du Midi Esplanade de l'Europe 1 1060 Brussels
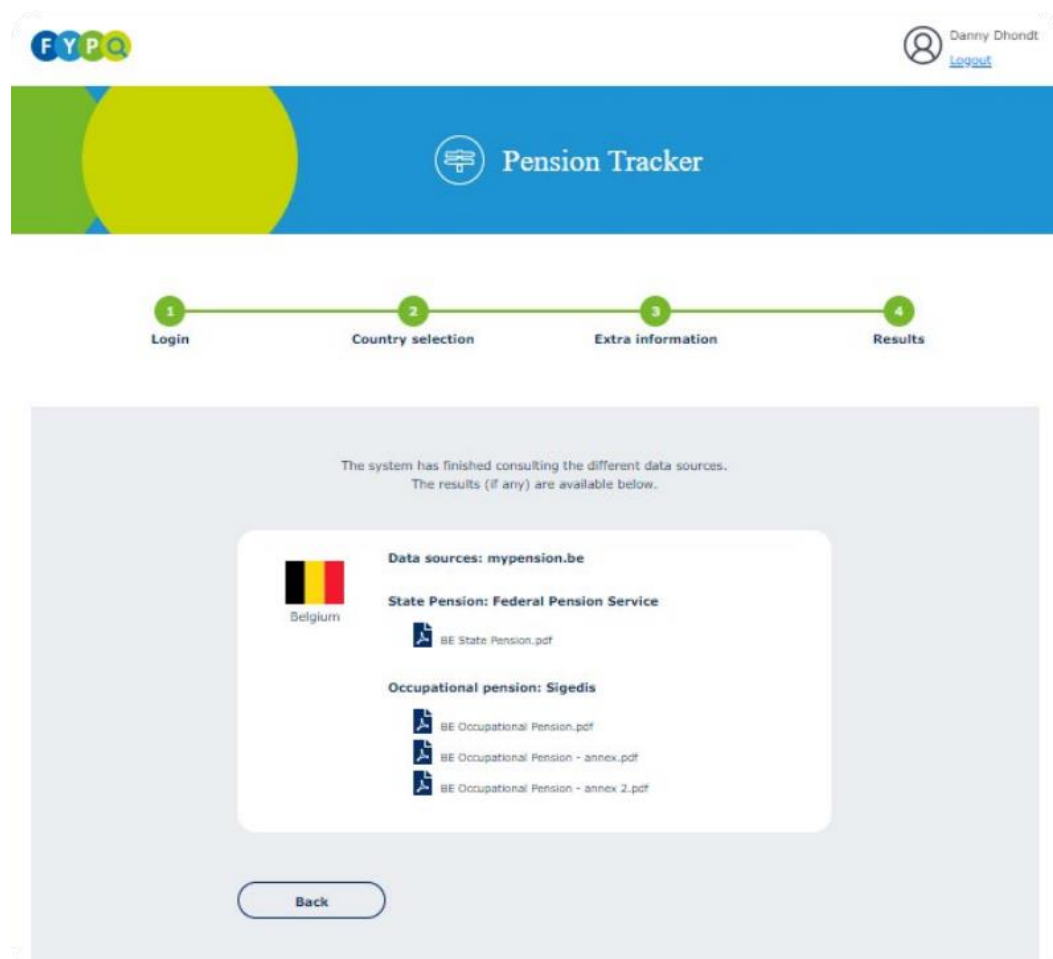
estimation@mypension.be

Toll-free telephone number: **1765**

Your pension file on www.mypension.be

TEST

File number		Date 20/01/2022	Annexes 1

Estimation of the amount of your future pension

Dear Madam

We have foreseen one or several scenarios in order to help you plan your retirement. These scenarios take the possible pension start dates and the estimated amounts of your future pension into account.
The estimate on the back is based on your career data that was available to us on **20/01/2022**.

According to your career data, you have built a pension right as a Civil servant as a employee
To get more details on your personal career, go to my**pension**.be.

How do we calculate this estimate?
Regarding your past career, we based the estimate on the career information that we received from your employers and from the social security organisms.

Regarding your future career, we based the estimate on your last known professional situation and we extrapolated it as if it would remain the same until your pension date. If you work part-time, or if you are in an assimilated part-time period, your earliest final pension date may be different than the current estimated pension date.

We hope that this letter will help you in your choices and we are always available if you need any further information

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Your pension estimate

On the basis of the current rules and regulations, we can provide an estimate for the following scenarios:

- You stop working at the **first possible pension date**, which will be the **01/05/2047**.
  On this date, we estimate the net amount of your pension at €579,16 per month.

- You stop working at the **legal pension date**, which will be the **01/03/2050**.
  On this date, when you turn 67, we estimate the net amount of your pension at € 579,16 per month.

You will find enclosed an overview of our calculation.

Important information

This estimate does not open any pension rights and is for information only.
Do you want to retire? Submit your request a maximum of one year in advance on my**pension**.be or during a Pointpension organized by the 2 pension institutions. Check the timetables for our Pointpensions on www.pensioenpunt.be.

Figure 21: Result PDF – Federal Pension Service – statutory pension Belgium – Details.

2.3. Behind the screens: conceptual framework of the ETS – connect concept

2.3.1 Basic architecture of the ETS – connect concept

Behind the screens of the FYP-portal, different actors are at work to get the user authenticated – identified – his pension information collected and visualized. Together they can be referred to as the ETS – ecosystem. A short introduction to the different actors.

The FYP-portal is responsible for all interaction and communication with the user.

The eIDAS – ecosystem deals with the communication between the FYP-portal and the authentication authority which issued the authentication mean chosen by the user.

The ETS-backend works as an orchestrator – ensuring the communication between the FYP-portal, the eIDAS – ecosystem and the NTS/data providers.

The NTS/data provider is responsible for the identification of the user and the collection and transmission of the correct personal pension information.

The following scheme illustrates the process and the implication of the different actors. A short overview of the different steps and its lead actor follows below.
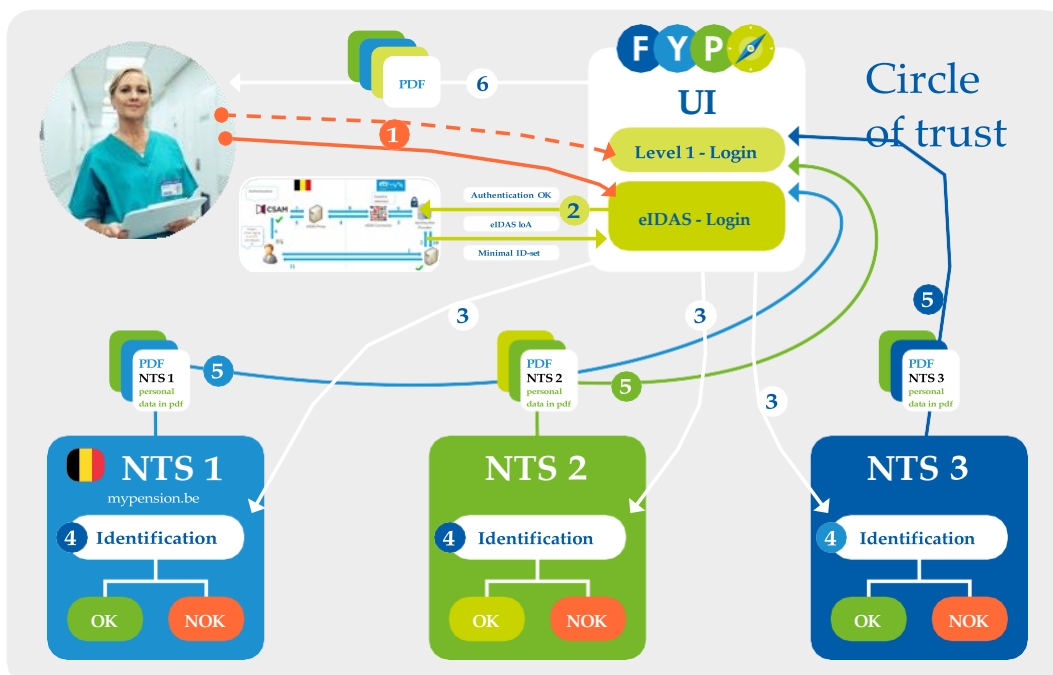
Figure 22: Scheme – Basic architecture of ETS – connect concept.

FYP-portal or ETS-frontend

1 As the user journey of Alexia above showed, the process starts when a user goes to the FYP-portal, starts the 'find my pension'-functionality and chooses the authentication system of his choice within the eIDAS-framework.

eIDAS – ecosystem

2 The authentication authority (on the national level, that issued the authentication mean) confirms the authentication at a given eIDAS level of assurance (LoA) and sends back the minimum identity set to ETS.

ETS (backend)

3 ETS checks the LoA of the authentication mean used by the citizen and checks it with the required LoA of the data provider.

4 If there is not a match, a message will be shown to the citizen and the provider cannot be selected by the user on the FYP-portal.

5 If there is a match, ETS 'calls' the webservice of the data provider chosen by the user. It transmits all necessary information (confirmation of authentication, LoA, the personal dataset (= Minimum Identity Set of eIDAS plus additional data added by the citizen in FYP-portal) to allow the data provider to decide whether it has enough certainty about the identity and consent of the individual to supply information.

NTS (backend)

6 The NTS applies its own identification routines and standards and concludes that there is a match between the personal dataset of the authenticated user and an individual in its own data.

The NTS sends back the available information in pdf-format to ETS.

7 FYP-portal
8 ETS visualizes the received information, i.e. makes the PDF accessible, on the FYP-portal

2.3.2 Creation of a FYP-profile: why and how?

To improve future user experience and facilitate the identification process on the national level, we propose that FYP will create a user profile with the consent of the user as described in step 8 of the user journey.

In the user profile, FYP will store:

1 Personal data coming from eIDAS.
   Minimal: First name, Last name, Date of birth.
   The level of reliability of the data is high and cannot be changed by the user.

2 Personal data added by the user.
   Some NTS need additional data on the user to help their identification process. This data is asked, after eIDAS authentication, on the FYP-portal. With consent of

the user this data is stored in the FYP-profile so it can be reused, without asking again, when the user logs on to the FYP-portal in the future.

The level of reliability (LoR) of the data provided by the user is not the same, but lower, as the LoR of the official data (1), because although authenticated there is no guarantee that the data added by the user is correct.

It is up to the data source to decided how to qualify and use these data, since the outcome and reliability of the identification process is the sole responsibility of the NTS.

3 national ID's coming from NTS after the identification (Level of Reliability = high)

If an identification has been executed successfully by the NTS, the national ID is stored on the FYP-portal. This to facilitate the identification when the user reconnects on the FYP-portal in the future.

The user can always view and delete her/his user profile via the FYP-portal.

This functionality is put in hidden to make it not too complicated for the citizen. Because it is also possible to create a profile with the website.

2.3.3.   Trust in the ETS-ecosystem: building a Circle of Trust

In the previous parts we answered multiple questions on how the user will experience the functionality and also how the technical architecture was implemented. Questions as how are we going to authenticate the user (using eIDAS), how the user is giving consent for data transfer (to the FYP-portal), how we are going to identify the user (via national procedures), …

As discussed, it is the ETS that will make a **'package'** of all information gathered and sends this to the NTS/data provider to evaluate if they can show the information and if yes, send back the pension data to ETS.

But with this a basic question remains: how can a NTS trust that ETS only calls for data if the user is on the FYP-portal and trust that the user has given consent for the data exchange?

The mere fact of authentication via eIDAS doesn't solve the trust issue, because with the creation of the FYP-profile, after a first consultation ETS has all information to start a new request for data without the user being online on the FYP-portal.

So, **how is trust organized in the ETS-ecosystem?**

As already indicated in the Proposal (3.2.2), different solutions can be envisaged to organize the requesting of data by the ETS towards the NTS/data provider. The most future proof being the combination of the OpenID-protocol and the Open Authorisation Standard (OAuth).

Within the project framework –time but mostly budget – it was not possible to

implement an architecture with an OpenID-protocol and Open Authorization Standard.[16]

Therefore, for the proof of concept the choice has been to explore the possibility of an alternative option, namely the creation of a **circle of trust between the ETS-ecosystem and the connected NT**S, as also indicated on the scheme of the basic architecture.

This in combination, on a technical level, with the implementation of **secured exchange channel** between the ETS-backend and the NTS/data provider. This means that there is a secured and trusted physical and logical communication infrastruc- ture between ETS as service provider, NTS as resource server and eIDAS as iden- tity provider. The data exchange between the ETS and an NTS/data provider will be secured by encrypting the messages that are exchanged.

- During the onboarding procedure, the NTS/data provider has to provide a certificate that can be used by the ETS to encrypt and decrypt messages exchanged between the 2 parties.

- This should be a private certificate only shared between the ETS and the NTS/data provider

- Messages that are sent to the NTS/data provider by the ETS will be encrypted using the certificate. That way the NTS/data provider knows that the request came from the ETS.

- Messages that are sent from the NTS/data provider to the ETS will also be encrypted using that same certificate. That way the ETS knows that the message came from the NTS/data provider.

This creates a secure tunnel between the ETS and the NTS.

But **no technical mean is foreseen to check at each exchange that the citizen is behind the request of data.**

The **Circle of Trust** implies that you trust each partner within the circle. Trust issues are dealt with beforehand, in the onboarding process by signing a **legal contract** between ETS and NTS/data provider and communicating the certificate.

By onboarding, the NTS/data provider confirms its trust in the ETS and accepts the rules that govern the Circle of Trust. The mere fact that a partner has been admitted into the circle proofs that certain checks have been executed, that legal provisions have been accepted and that the certificates are communicated.

The NTS/data provider has to fully trust ETS and its security measures and vice versa. The NTS accepts and trusts that a request for data coming from ETS is legitimate,

· ·

16   Estimated implementation cost of an OAuth and openID-architecture was 95.000 EUR. To compare – the complete implementation budget for the Proof of Concept of the Connect concept was € 200.0000.

meaning the request for data is coming from ETS and there is a user on the FYP-portal requesting it and the consent is still valid.

The viability of the circle of trust is tested in the bilateral talks with a selection of NTS (cf. infra). The option of introducing an Open Authorization server in the basis architecture has been discussed in the bilateral talks as an alternative for the Circle of Trust.

2.3.4.   Onboarding checklist: what has to be done to connect a NTS to FindYourPension.eu today?

To conclude, this chapter we give a short checklist of what must be done by the NTS and ETS to realize a connection.

Administrative onboarding:

- NTS and ETS have to sign a **formal agreement** to form a **Circle of Trust** and thus accepting the rules that govern the Circle of Trust
- NTS has to register the **minimum Level of Assurance** of the authentication mean that the citizen can use to access the data at the ETS.
- In this way the NTS can block access to the data if the authentication means used has a too low level of assurance. The level of assurance can differ between connected NTS.
- NTS has to register the **minimum personal dataset** of the citizen that is required to execute the **identification** process by the NTS
  Some NTS cannot come to a reliable identification solely on the basis of the eIDAS minimum identity set. In the onboarding process they can register additional data needed for user identification. This data is asked, after eIDAS authentication, on the FYP-portal as described in step 7 of the user journey. The additional data is, with consent of the user, saved in the FYP-profile for future usability purposes.
- NTS has to communicate its certificate to ETS and ETS has to implement it to guarantee a secured data exchange.

Technical onboarding:

- ETS has to communicate the ETS API to the NTS and the NTS has to implement it as defined.
- NTS has to identify the citizen with the received dataset.
- NTS has to send a response to FYP.eu

2.4. What's in place today? Status of implementation

All components of the proof of concept 'Find my pension' - functionality, as described in the following scheme of the ETS-ecosystem, are effectively developed, implemented and deployed on a test environment (Quality assurance environment) and production environment. All functionalities as described in the previous chapters are developed. In point 1.3.1 a more detailed, technical overview of the implementation in place is given.
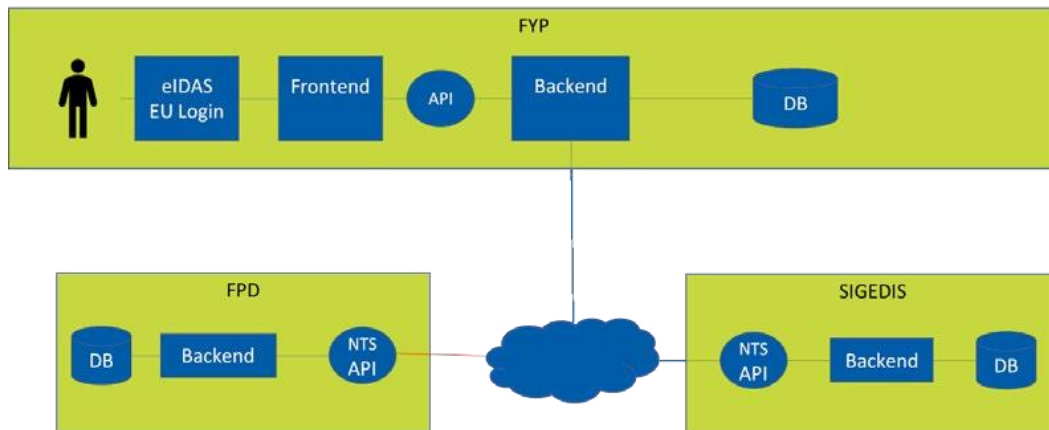
Figure 23: ETS-ecosystem 'Find my pension' – functionality.

Also, the necessary accompanying technical documentation for the maintenance and further roll-out of the 'Find my pension' - functionality is delivered, like the description of the POC-infrastructure, the data structure and data dictionary, the API – rest service definition,…

So, both the central components at the FYP-level as the connection with the local components, developed by the Federal Pension Service for the Belgian legal pension and by Sigedis for the Belgian complementary pension, are in place.

Concrete: a user can access his data of the Belgian data providers starting from the frontend of the 'Find my pension' – functionality after having authenticated himself via eIDAS.

Detailed overview of the ETS-ecosystem implementation

The ETS solution consist out of two major components: the ETS-frontend and the ETS-backend.
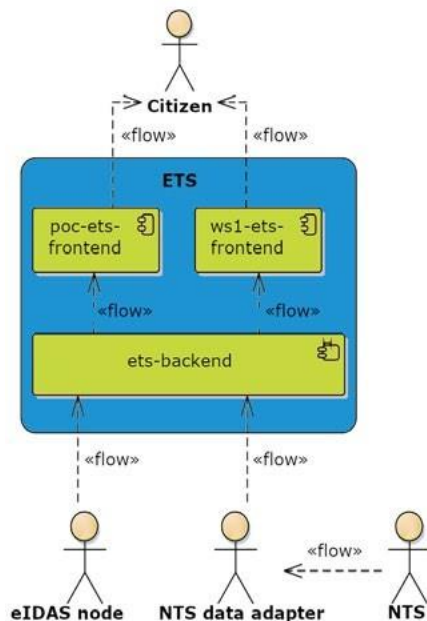
ETS – frontend is the web application allowing a user to access his/her pen¬sion information in different European countries.

In the solution today, the 'Find my pension' - functionality is in principle accessible via 2 distinct front ends:

* **the pocets-frontend:** the initial frontend developed by WS2 as a proof of concept (as shown in the screens of the user journey – and implemented);

* **the ws1-ets-frontend:** the future frontend that will be designed and developed during WS1 and that will become the final user interface after the integration of the POC in the FYP-portal (as discussed above and to be developed before going into production). This will make **the poc-etc-frontend** obsolete.

Both front ends will use the ETS-backend to get things done and will offer the same global functionality.
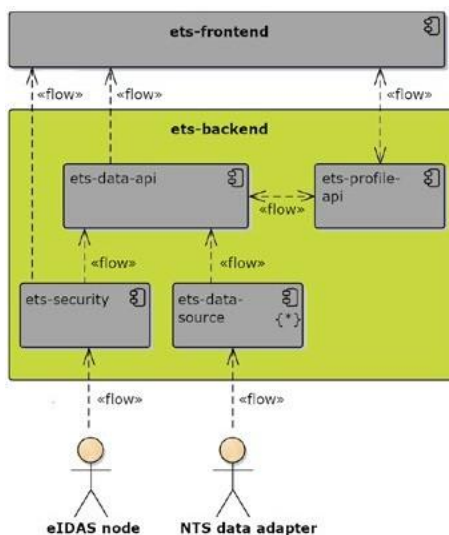
The second scheme of the two figures on the left goes into more detail on the architecture of the ETS-backend component.

ETS – backend is the module offering the ETS service backend functionality.

The ETS backend exposes 2 API's:

* **ets-profile-api:** the API for managing the (optional) ETS profile

* **ets-data-api:** the key API exposing the pension data towards the ETS-frontend/ FYP-portal

The data API uses the **ets-data-sources** to get the data from the **NTS** via its **NTS data adapter.**

The ETS solution interacts with the following actors:

- **Citizen:** A citizen accessing his/her pension information in different European countries
- **NTS data adapter:** An external system hosted by a NTS/data provider that has implemented the data provider API as defined by the ETS and which offers access to the pension data of a specific country/institution/data provider.
- **NTS:** The national counterpart of the European pension tracking service. This can be a NTS following the commonly used strict definition of National Tracking Service or a national data provider.
- **eIDAS node:** An external system capable of authenticating a citizen using the eIDAS protocol

The complete ETS solution is deployed on the Belgian government G-Cloud environment.[17]

From a hosting perspective ETS will be secured by

- A firewall on G-Cloud level
- A bastion on ETS level

The ETS bastion will act as

- A firewall mimicking the G-Cloud firewall allowing only HTTPS and SSH traffic
- A jump host towards systems lying behind the bastion

This security setup will ensure that

- We have one single entry point towards the ETS environment
- There is only HTTPS access to data and functionality knowingly exposed via HTTPS
- Trusted parties can be granted low level access to the environments using registered users and their SSH key
- SSL offloading is done in the ETS runtime environment ensuring that all network traffic remains encrypted until it reaches its final endpoint

. . . .

17   See https://www.gcloud.belgium.be/nl/home for more information.
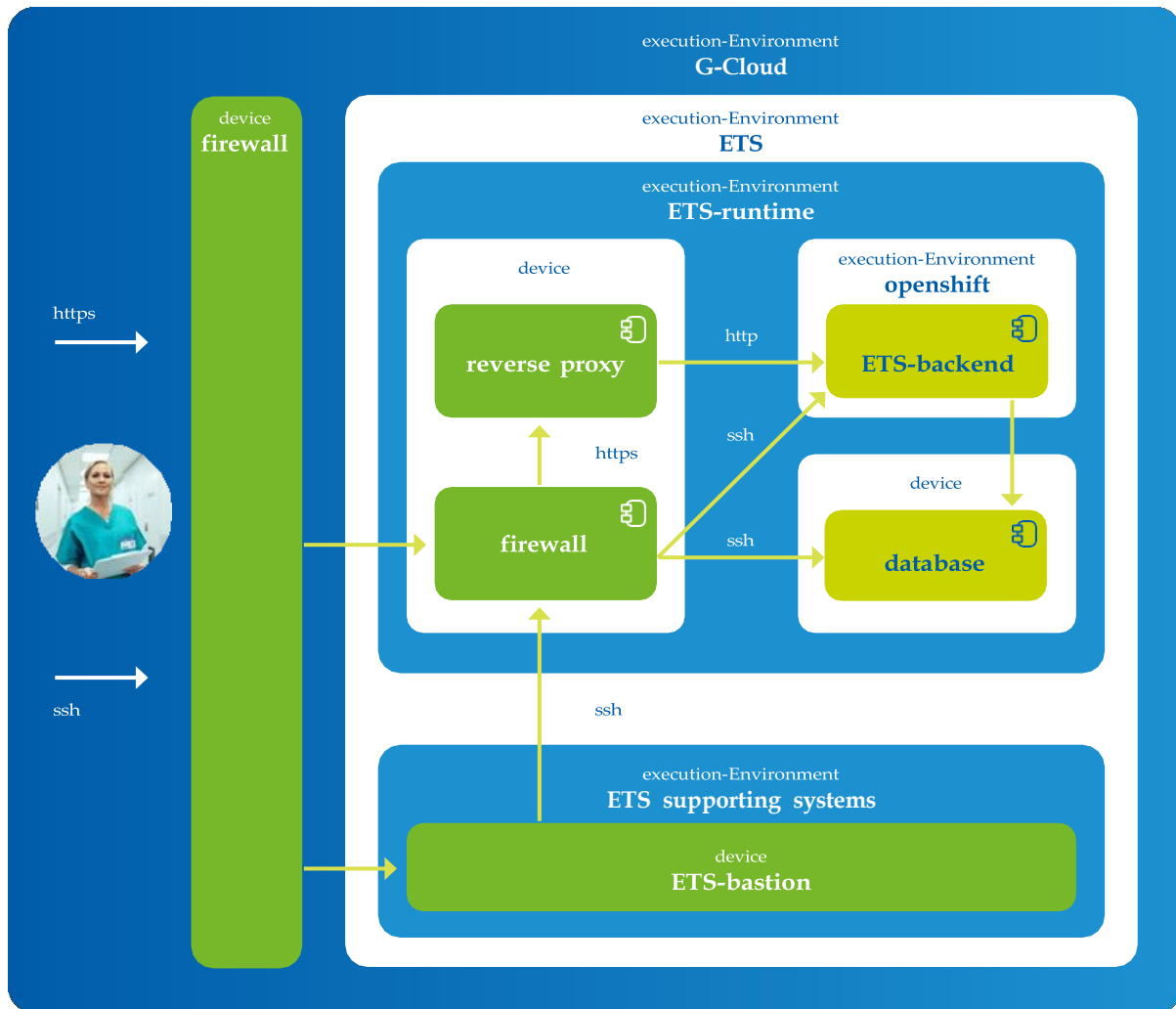
Figure 24: The security set-up.

2.5.   What did we learn from the bilateral talks with NTS?

Designing a solution to a problem in the vacuum of a project team is one thing, testing its viability in the 'real' world is another.

The design of the ETS connect concept - solution has been described in detail in the previous chapter. That it can technically work has been proven by the implementation by the Belgian project partners. But that the solution design is acceptable and thus viable for other parties was the object of the bilateral talks that were organized with the representatives of different NTS.

The approach of t+he bilateral talks was:

1   Explain the design of the proof of concept in detail

2 Go through the conceptual choices made in the solution design to determine if they were accepted by the NTS and if applicable under which conditions

3 Identify blocking issues on the national level for the roll-out of the ETS connect concept.

The following topics were discussed in detail:

- Trust in the ETS-ecosystem
- Consent of the citizen
- State of play of eIDAS onboarding on the national level
- Required level of assurance on the national level
- Identification in the ETS-ecosystem
- Constructing the FYP-profile

The focus was on the exploration of the technical feasibility of the POC, and with the exception of the issue on trust and the consent of the user, the topics of privacy by design and GDPR were out of the scope of the bilateral talks. These were dealt with in Workstream three of the project.

In total 4 bilateral talks were conducted, firstly with the project partners with an operational ETS, Sweden and the Netherlands, secondly with the representatives of the NTS of Denmark and France.

All bilateral talks were conducted by Giselda Curvers and Danny Dhondt (lead of implementation ETS - connect concept) to guarantee a coherence of approach and interpretation.

Date	Country	Organization/Participants
June 2020	Sweden	MinPension: • Anders Lundstrom • Patrick Lundstrom Pensionsmyndigheten: • Alexandra Bateman
December 2020	Netherlands	Mijn Pensioenoverzicht.nl / Cognizant: • Rik Van Amelsfoort
December 2020	Denmark	Forsikringogpension: • Michael Rash
February 2021	France	Union retraite: • Philippe Retailleau

Table 1: The approach of the bilateral talks

2.5.2   Main conclusions: overview of blockers for future technical roll-out

Circle of Trust: acceptable a priori but the devil is in the details

Circle of Trust would be acceptable for the majority of the NTS but only if sufficient accompanying security measures are taken in the onboarding process, like for example an audit of the implementation upfront but also an audit trail that can be consulted in the case of suspect of misusage.

The effective acceptance of the Circle of Trust is thus highly dependent on the details of the agreement governing the Circle of Trust.

Circle of Trust as potential blocker for future enhancements

From the bilateral talks we also could conclude that the scope of the Circle of Trust would be limited to the scope of the proof of concept, namely NTS sends pdf/data to ETS to show on ETS-portal. As in most NTS-architecture, this would be the result of an online, synchronized data exchange. [18]

The Circle of Trust would not be sufficient anymore if the ETS would evolve to a data hub in a later stage. Data hub being defined as an ecosystem via which data is not only shown on the ETS-portal but also exchanged between the members of the ecosystem to be shown on e.g. the NTS-portal. Following the consulted NTS, if ETS would function as a data hub in the future, the inclusion of an OAuth-server in the basic architecture of ETS would be necessary.

Introduction of Open Authorisation server (OAuth) in ETS – basic architecture

OAuth is an open standard for access delegation, commonly used as a way for Internet users to grant websites or applications access to their information on other websites but without giving them the passwords.

It allows access tokens to be issued to clients by an authorization server, with the approval of the resource owner (i.e. citizen). The client/service provider (i.e. FYP/ETS) then uses the access token to access the protected resources hosted by the resource server (i.e. NTS).

The protocol and standard are used to communicate between the parties that a user is authenticated and that the requesting party has the necessary consent of the user. The data source will then have the necessary guarantee that the data request is initiated by the authenticated user.

In the next scheme the OAuth-server is introduced in the basic architecture of ETS by adding a distinct **Identity and Authorization module** with the following

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18   Storing pension data on the ETS-level was not acceptable for the consulted NTS.

functionalities: Authentication via eIDAS, Authorization via OAuth. Next, we will give an overview of the responsibilities of the different actors in this type of architecture.
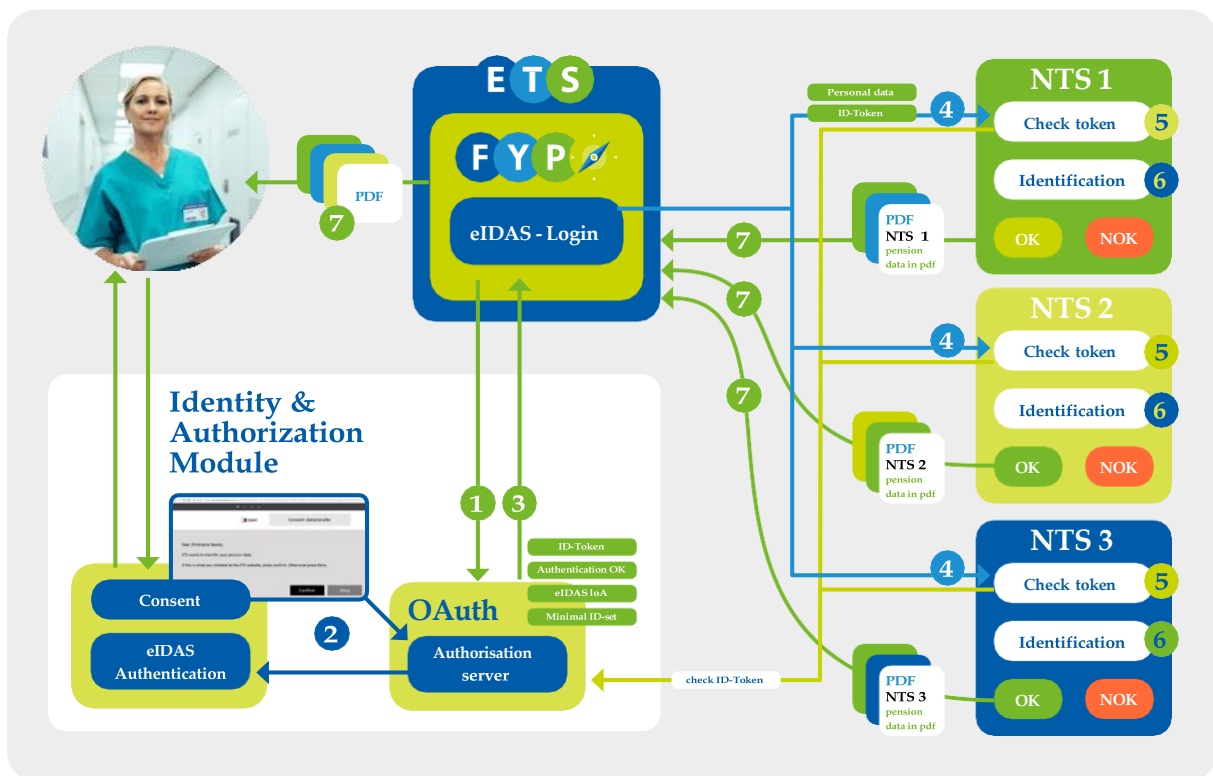
Figure 25: Scheme: Basic architecture of ETS – connect concept with OAuth (proposition).

The **Identity & Authorization module** would be responsible for:

- the communication with eIDAS to authenticate the user
- storing the consent of the citizen to exchange date between FYP and the requested NTS/data providers at the OAuth-server
- sending the eIDAS-dataset and ID-token of OAuth to ETS

ETS would be responsible for:

- sending the ID-token of OAuth to the NTS/data provider
- requesting the pension data at the requested NTS/data providers

NTS/data provider would be responsible for:

- checking the ID-token at the OAuth-server
- sending back the pension data to ETS

Regardless the consent of the user, national legal restrictions could block data exchange between ETS and NTS

Depending on the governance and organization of the NTS, the consent of the user is or isn't enough to authorize the data exchange between the NTS and the ETS. In some countries it will be necessary to adapt legally binding agreements with national data providers or even national legislation wanting to protect citizen's data but in an ETS-context blocking participation in the connect concept.

If the consent of the user is sufficient for a NTS, in some cases it was mentioned that it will be necessary to add 'national' terms of use to be 'signed' by the user when using the ETS-portal to retrieve the national data.

In all cases the citizen should have the possibility to withdraw its consent to the ETS and to the 'national' terms of use if applicable.

This point will be elaborated further in the part on the security by design and GDPR.

Identification of the citizen needs to be solved on the national level, but this doesn't mean a NTS has a hold on it

The bilateral talks made clear that identification is the biggest challenge in the proposed ETS-architecture. Identification of the citizen is left to the national level, ETS provides via eIDAS the minimum dataset to facilitate the task. But identification is not done on a transversal level.

eIDAS, thus, solves the authentication part, but leaves the identification of the end user to the national level. The minimum dataset offered is for several countries not sufficient to successfully complete the task. Often national ID's, social security num- bers, etc. are needed in addition in order to come to a successful identification.

Although the ETS-user flow showed that it is foreseen that this information is asked by the citizen, at least two considerations have to be made:

1 the reliability of the data is far less secure because coming from the end user, making it – at least in theory – more vulnerable to identity fraud and misusage;
2 in the context of multiple mobile workers (our core audience group) it's not likely to expect that the end user has all of these credentials at hand when using the ETS-portal.

In our discussions with the NTS-managers also became clear that the authentication/identification of users was often implemented in the NTS as an external service provided by a national third party. The way authentication/identification was organ- ized and would evolve during the coming years was in some case even a real black box.

The identification issue is thus a real threat to the future success of the ETS-portal. Put it bluntly: because it's no fun getting a box of pension 'toys', if you cannot open it.

2.5.3.   Recommendations

The success of ETS is directly linked with the success of eIDAS: further invest- ment in eIDAS onboarding and marketing are needed

In theory eIDAS solves the authentication issue.

But as with all new technology, its success in facilitating the use of digital applications in Europe is directly linked with the end user/citizen being able to use its national authentication mean and knowing it can be used in a European context. To this end more marketing and direct communication towards the end user could be useful.

The eIDAS front end is clearly built for use in a professional context and could use some finetuning to make it more user friendly and intuitive. Ideally, the eIDAS flow reassures and encourages the user to succeed in its user journey. This is today not the case and the current implementation could cause fall out in the use.

The developments in the realm of the Single Digital Gateway could also have a pro-moting effect on the use of the national authentication mean via the eIDAS ecosys-tem, but also in this case the same pitfalls apply: SDG will not be successful if the cit- izen doesn't know how to work with his national authentication means, and doesn't know he can open up European doors.

That the room for growth is substantial is illustrated by the following: today only 0,02% of all authentications in the domain of Belgian social security is done via eIDAS. In absolute figures this accounts for on average only 300 eIDAS authentica-tions per month. If foreign people known in the Belgian administrative datasets were to use Belgian online applications to the same extend as Belgians (given the relative size of their presence in the data), that number should be around 2%.[19]

Member states should be stimulated to invest in notifying authentication means with a sufficiently high level of assurance

We already discussed the issue of identification, that could frustrate the citizen not get-ting the information because identification failed. Another threat is the level of assur- ance of the authentication mean a Member State notifies in the eIDAS-framework.

If the result of the peer assessment is a (too) low level of assurance, the citizens of the member state will not be able to see their pension data coming from other member states that require a higher level of assurance. It is the data provider that decides in the onboarding process of the ETS what level of assurance is acceptable to see its

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19   Estimate based on figures of the Federal Pension Service: Proportion of EU pensioners paid out by FPS on total number of pensioners paid out = 7,47% (=185.000/2.471.000). Assumption based on general use of mypension.be = 25% of population uses mypension.be. So expected proportion of eIDAS in the future = 1,87% or rounded 2% of all authentications in the domain of BE social security.

pension data.[20]

A (European) obligation to notify an identification means with a sufficiently high level of assurance, e.g. LoA higher or equal to substantial, would enhance the use that is made of European applications and the user experience of the citizens using European applications. This remark goes equally for the Find your pension – portal as for the online procedures foreseen in the Single Digital Gateway.

Extending the minimum identity dataset of eIDAS to guarantee the once only principle and successful identification in the future

After authentication with eIDAS only the MID (minimum identity dataset) is send to the demanding application. As also the NTS – bilateral talks showed, most countries cannot sufficiently secure identify a person with only the MID.

In the onboarding process to the ETS the NTS can register additional data needed for user identification. This data is asked, after eIDAS authentication, on the FYP-portal as described in step 7 of the user journey. The additional data is, with consent of the user, saved in the FYP-profile for future usability purposes.

This data is often available at the authentication source, but not communicated via eI-DAS. This is not user-friendly and reduces to usefulness of eIDAS. Moreover, it also breaches the once only principle – a European citizen is asked to take unnecessary administrative steps, while the information is at hand with the authentication source.

Therefore, we recommend to extend the personal data exchanged via eIDAS beyond the minimum identity dataset with for example, the national ID, sex, current address, birthdate, birthplace, … This data coming from an authentic data source, opposed to self-declaration by the citizen, will have a high level of reliability (LoR). Hence, it would also increase the reliability of the use of this data in the identification process of the citizen in the national databases.

To do:

- European building blocks are needed to enhance the development of European digital services: a strong case for a European authorization server, digital identity and identification module

- Legislation could solve the national data exchange issues

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20   Accepting a certain means of authentication, or not, is a decision that is the sole competence and responsibility of the data source. In as far as these sources are public authorities that are, in addition, participating in the eIDAS-framework, certain rules could apply that limit their possibility to refuse a given means of authentication if that means of authentication qualifies as equal – in terms of the so-called Level of Assurance or LoA – to the national means that are accepted. But it will not oblige them to accept foreign means of authentication of a LoA that would not be accepted form national means either.

Appendix to Chapter 2: Bilateral talks: detailed overview of agenda

Part 1: How do we deal with trust in the ETS ecosystem?

- Does your NTS accept the Circle of Trust (CoT) between FYP & NTS?
- If no, is CoT with authorization server for your NTS an acceptable alternative for the 'pure' CoT between FYP & NTS?

Part 2: How do we deal with consent of the citizen in the ETS ecosystem?

- Is users consent enough to exchange data between ETS & NTS?
- Is a contract required to exchange data between ETS & NTS?
- Is a legal change required to exchange data between ETS & NTS?

Part 3: How do we deal with authentication in the ETS ecosystem?

- What is the minimum required LoA (Level of Assurance) for access to your NTS? High, substantial or low?

Part 4: How do we deal with identification in the ETS ecosystem?

- Is the identification of the user a problem for your NTS?
- Are there special requirements for the execution of the identification routine by your NTS?
- Can your NTS do an identification on the basis of the minimum dataset of eI-DAS (name, first name, date of birth)?
- If not, which additional data are required for executing the identification routine?

Part 5: Constructing MyProfile@FYP

- Does your NTS accept:
- to send the found National ID in the identity database of the NTS to FYP
- and that FYP stores the National ID in the user profile if the user gives his consent for it?

Part 6: Last topics

- Is it possible/feasible to have an in sync exchange of pension data between your NTS & ETS?

Would it be envisageable for your NTS to store pension data centrally at ETS if a future enhancement of the concept would require this

WS2a: A perspective on the functional roll-out of the Pension Tracker: from product vision to tentative data model

Nomen est omen. The name speaks for itself. And the name of our 'Find your pension'- portal does it loud and clear. The expectation we create, maybe even the promise we make to mobile citizens, as ETS-consortium is 'Find your pension' in Europe through an user friendly pension portal, based on an intense collaboration between European pension peers.

This ambition is also expressed clearly in our vision statement:

> All residents in European countries should have access to information on their pension entitlements no matter where they were acquired within Europe and regardless of their country of residence.

The ambition of which we drew our main mission:

> 'to create the means for people to get an overview of the pension entitlements they have acquired across Europe and to give them tailored as well as personal information on their European pensions.'

Our vision on how we will design the tailored information on pensions for mobile workers in Europe and make it accessible via the FYP-portal is described in chapter 1 of this report.

In this chapter the focus is on the **personal information part**, on the **overview of the pension entitlements acquired** in different European countries. We will focus on the work that has been done to create a common vision on which personal information should be mentioned on the FYP-portal. Often and more technically, we speak of a common data standard or data model.

But all - ICT or pension - technical discussion should start with a **vision on the 'prod- uct'** we are building. And from there the requirements on the information to be shared can be deducted in a data model. It's also this approach we will follow in this chapter.

The conclusions as stated in this chapter are not final or set in stone, but reflect the common vision that could be distilled from the discussions with the different participants in the data model workshops. And can serve as a starting point for the next ETS-organisation.

Product vision 'Pension Tracker': from minimum viable to minimum marketable

Our 'product' consists of helping citizens finding their pension in Europe and giving them access to their personal pension information. But what is the personal pension information that we want to give to mobile EU citizens? What are the functionalities that have to be foreseen? But also how does our 'product' relate to other products in the field? And more concretely, what should our ETS-product do in relationship to the NTS-products?

Our *minimum viable* product: Help finding pensions in Europe

The **first ambition** of the ETS is helping the mobile citizen in **finding his pension in Europe**. This means giving the mobile citizen a complete overview of his pension status in Europe. **Pension status** defined as **there is/is no pension cumulated** in a specific country for the mobile citizen. Put differently, the pension status gives the result of the pension tracking process in a specific country.

The current version of the Pension Tracker (v1.0) in production already fulfills the requirement of this first ambition:

> If a NTS or national data provider connects to ETS, the citizen can 'ask' through the Find Your Pension-portal to check if pension build up can be found in that country or at that data provider. If the result of this 'pension tracking process' is successful, as in the citizen can be 'found' in the national/local database and the citizen 'has' a pen- sion right, then a PDF with personal pension information is shown on the FYP-portal.
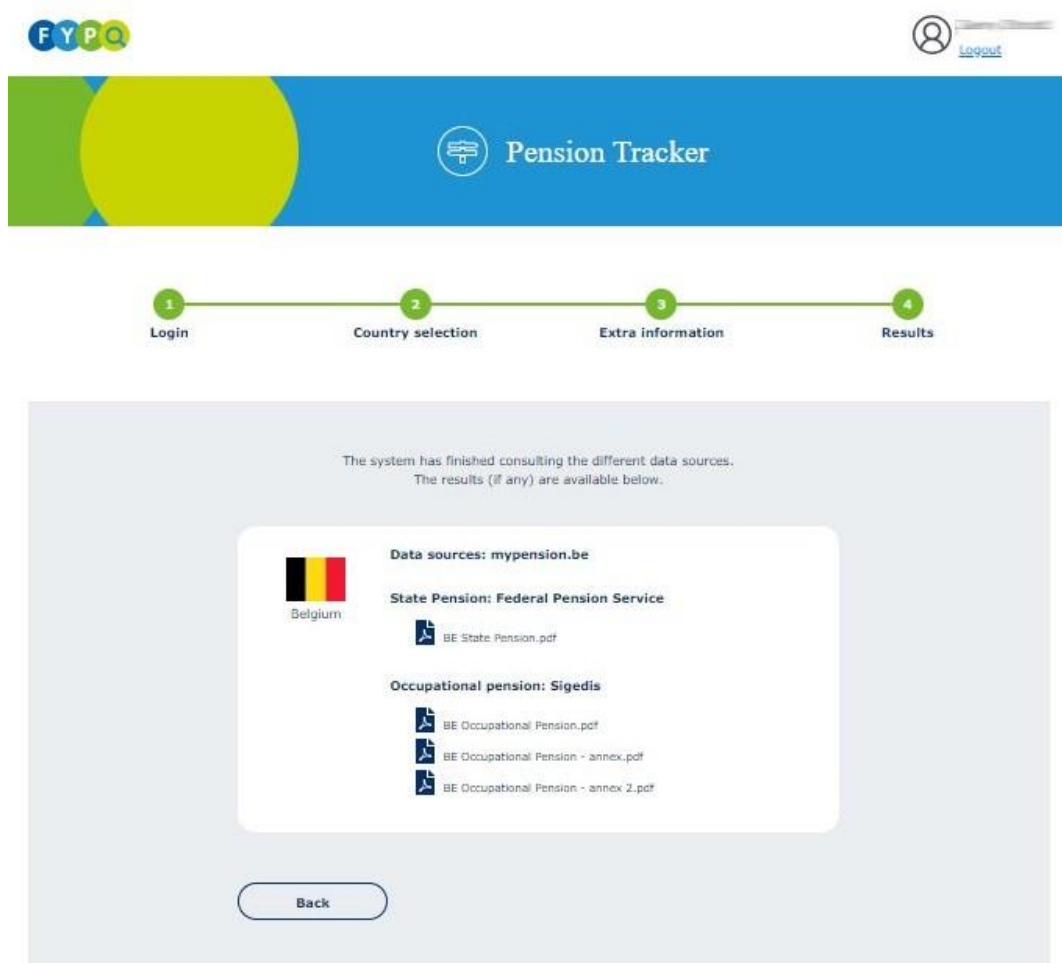
Figure 26: Pension Tracker v1.0 – result screen

If the Pension Tracker would cover the whole of Europe, as in successfully connecting NTS or substantial data providers for all European countries, the first ambition level of ETS would be reached and the citizen would have **a single point of reference to check his personal pension status in Europe**. We could see this as the **minimal viable product** in the Pension Tracker roadmap.
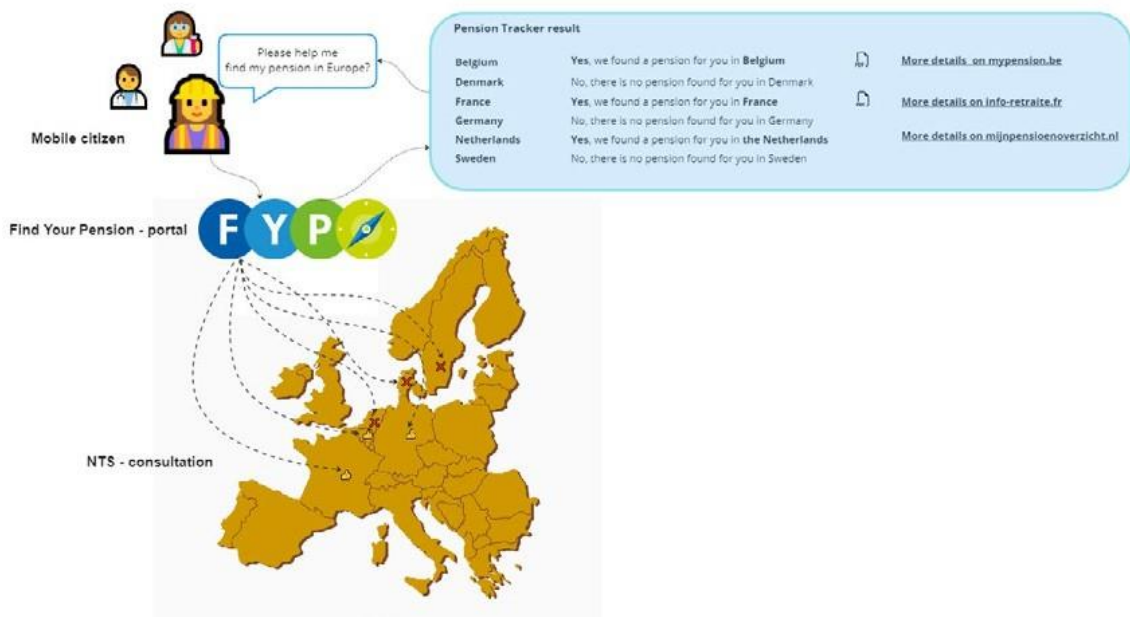
Figure 27: Pension Tracker as single point of reference for pension status in Europe

The use of the term minimal should not be read as unambitious. To realize this first ambition the **focus** should be **on the geographical roll-out** and **connecting a maximum of countries,** while keeping the functional scope limited. But as described in chapter 2, there are still some challenges linked to successfully onboard other countries in the ETS-ecosystem to attain this first ambition.

Our *minimal marketable* product: Answering key question on the found pension in an understandable and comparable way

From the start of the project the aim of the ETS-consortium was not to stop at the minimal viable product as described above but come to an agreement on a **minimum marketable product**[21] that brings immediate value to the end users and the project stakeholders.

This minimum marketable product should therefore:

- Take into account the **needs and expectations of the citizen/mobile worker**;

But still:

- **Be realistic – technic wise** – regarding the possibilities and capabilities of the NTS, data providers but also the central ETS-ecosystem;

- **Be realistic – time wise** – possible implementation in the **near future**. The goal of this track in the ETS-project was to explore what could be realized in a time frame of 3 to 5 years.

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21   A Minimum Marketable Product (MMP) could be the next practical step after MVP (minimum viable product) in the product development process. While an MVP focuses on validating assumptions and learning about your users preferences, an MMP incorporates a core set of functionalities that addresses customer/ user needs, creates the desired user experience and can start creating quantifiable value for the business. … The MMP primarily is a tool to reduce time-to-market and: It can be launched more quickly than a fat, feature-rich product. (Source: https://rolandwanner.com/minimummarketable-product-in-agile-product-development/)

This minimum marketable product thus balances the need for an extension of the functionality for the user with the availability of the necessary building blocks on the side of the project partners in order to limit the time to market as much as possible.

Approach and methodology

The scope of this minimum marketable product was refined in different workshops with NTS-representatives (BE, SE, NL, DK and DE), mainly coming from countries represented in the ETS-consortium.

Both an **'outside in'** - approach – starting from the mobile workers needs and expec- tations as an **'inside out'** - approach starting from the current NTS pension overview were combined to come to a relevant and realistic proposition.

Why did we not only follow the user centric design approach? All NTS have on the national level already defined what the best way is to communicate given the specificities of their national pension landscape. All NTS have already made choices to communi- cate in the most user friendly way. Behind the 'inside out'- approach was the willing- ness to maximally capitalize on the experience that NTS bring to the table.

ETS should not only capitalize on the NTS experience but also on the already existing building blocks at the national level. Finding a common denominator in the informa- tion NTS are already offering could be a way to reduce the project cost at the NTS/ data provider level and limit ETS-specific development.

Moreover, in the refinement workshops became clear that **coherency of communi- cation** between the 'FYP'-portal and the NTS's was an important design principle for the NTS-representatives. Coherency between different sources of information on the same pension data is necessary to not confuse the mobile citizen in a knowledge area that is already considered complex.

Taking the crucial questions of the citizen on his pension as a starting point, we used the current NTS 'solutions' as an inspiration base to make the work on the data model tangible and concrete. The wide variety of national pension architectures 'around the table' made the exercise realistic in terms of complexity.

Starting point: the needs and expectations of the citizen/mobile worker

Stating that ETS will meet all expectations and needs of the citizen/mobile worker is unrealistic given the complexity and variety of the pension landscape in Europe. Both for the general pension information as for the personal pension information, ETS will focus on answering the **crucial questions of mobile citizens** on their pen- sion in Europe.

On the basis of the insights of the pension communication experts consulted dur- ing the project, the **crucial questions** citizens have on their pension are quite straightforward:

- **Do I have** a pension?
  - Who can I contact for it?
- **How much** is it?
- **When** will I get it?

Next to knowing what questions we are going to answer, we also explored on which 'pensions' we should answer these questions to meet the basic need of the mobile worker. **How should 'pension' be defined** in the minimum marketable product of the ETS Pension Tracker?

Assumption is made that the first concern of a mobile worker is finding information on his retirement pension. Find your pension would become **find my retirement pension.**

This choice was also induced by the practical issues we could encounter: some NTS do not have information on survivor's pension, other pointed out that it could lead to privacy issues. Although we are aware that survivor's benefits and other pension related entitlements are very important, also for mobile workers, we did not do a detailed feasibility analysis during the project workshops.

Given the focus on finding a minimum marketable product, **other pension entitlements including survivor's benefits are out of scope** for this phase and **focus is on retirement pensions.**

Link with generic pension information on the FYP-portal
On this point there is a divergence with the general information part of the FYP-portal in which the information on the survivor's benefit is covered by the crucial questions of the pension landscapes.

So the mobile worker cannot find information on the acquired entitlement for survivor's or other benefits via the Pension Tracker but could receive general information via the pension landscapes of the FYP-portal. Or could be referred to the NTS where all details are available.

More details on the elaboration of the generic information part of the FYP-portal is found in chapter 1.

A second assumption is that pensions that are already in a decumulation, pay-out phase don't need to be found anymore.

- ETS will focus on retirement pensions in the cumulation phase
- ETS will not provide information on survivor pensions or other pension benefits

ETS will not provide information on pensions in the decumulation phaseThe conclusion of the data model workshops was that answering these **crucial questions for**

retirement pensions in an understandable way and in a unique visualisation at the ETS-level would already generate an important added value for the mobile worker in Europe in comparison to the current situation.

Reality check: capabilities on the ETS-level

To manage complexity, the implementation of 'business/pension' rules will be limited on the ETS-level. More concretely: ETS will show the data coming from the NTS/ data providers on the FYP-portal without altering the data at the central level. All specifications on the data have to be defined in the data model and delivered as such by the data providers.

The development of coordination/calculation/business rules is too complex and costly on the ETS-level. As a consequence, ETS will not do **projections** in the foreseen timeframe of 3 to 5 years. If defined in the data model, NTS can provide projected pension amounts to show on the FYP-portal.

Important nuance: Adding up gross amounts is not considered as altering data. As long as the data standards are unambiguous clear and the data sources validate what can be added up, ETS could make an addition of the gross amounts on the FYP-portal.

Currently the following actions are identified as 'out of scope' for the ETS-level:

- ETS will not convert yearly annuity to monthly amounts
- ETS will not convert gross amounts to net
- ETS will not recalculate to EUR
- ETS will not do projections

Impact on business model

ETS does not have to give full NTS functionality, nor provide a comprehensive over- view on the personal pension situation to generate value for the mobile worker. This position has been accepted by the ETS-steering committee and has led to a **redefini- tion of the basic value proposition for the ETS** to:

Providing basic information on pensions accumulated across the EU and helping the individual in answering their primary questions on these pensions.

More details on the business model of ETS can be found in <u>chapter 3</u>.

Translating the Pension tracker product vision to a first tentative data model

To realize the first stages of the Pension tracker product vision, as elaborated above, only a subset of the data available on NTS-level is necessary. This is visualised in the figure below. This visual links the different stages of the Pension tracker product vision to the data needed form the NTS-level. With at the core, the minimal viable product, followed by the minimal marketable product and finally full NTS-functionality.

In the Pension tracker's roadmap different stages of increasing functionality and complexity could be imagined between the minimum marketable product and reaching full NTS functionality. These milestones are not defined at this stage, since focus is on delivering the minimal viable product and preparing the minimal marketable product.
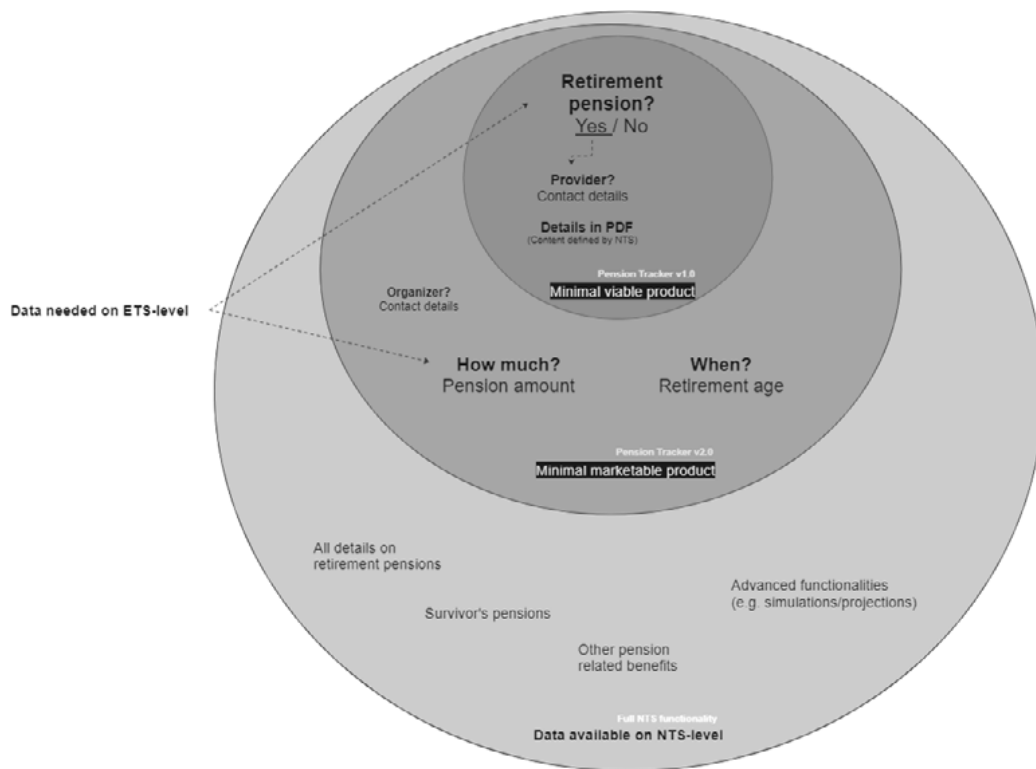
Figure 28: Relationship Pension tracker product vision and key attributes

What data is needed for the product vision?

For the **minimal viable product** which focuses on **finding retirement pension** entitlements across Europe, the data is limited to:

1. An indication of whether or not there is a pension entitlement for the mobile citizen at the consulted data provider

2. And if so: the contact details of the provider who can help the mobile citizen with his further questions

3. Optional: the data provider could send an overview of the details of the pension entitlement in PDF-format, as today implemented in the Proof of concept of the Pension Tracker (see chapter 2 for all details). The content of the PDF is completely defined by the data provider.

   Delivering a PDF should be optional because not all potential data providers have an off-the-shelf PDF solution and specific implementation of this PDF-solution could become obsolete with the elaboration of the data model in later

stages of the Pension tracker roadmap. In this case a reference to the NTS, in addition to the contact details of the provider, could help the mobile worker forward in finding the details of his pension entitlement.

For the minimal marketable product which focuses on **answering crucial questions** on the found pension in an understandable and comparable way, the aforementioned data is completed with data on:

1 The pension organiser – often more recognizable for the mobile worker than the pension provider –
2 How much the retirement pension is worth today, the pension amount
3 And when the mobile citizen can get it, the retirement age

Next challenge: defining common definitions

As straight forward the crucial questions of the mobile citizen are, even the translation to key attributes to answer these questions, the experience of the workshops learn that it is far less straight forward to come to a clear and unique definition of these attributes. This difficulty is induced by the complexity of pensions, but also by the different pension architectures throughout Europe.

The following overview gives the current status of the reflection on the ETS-data model. It is a first tentative data model of the ETS' Pension Tracker. But the work is not finished, it is a starting point for the new to establish ETS-organisation who will continue the work and bring this tentative model to maturity.

	Attribute	Goal of the field	Definition
Pension?	Pension status	Answers the question on what the result is of the pension tracking proces	Possible outcomes: 1 Yes: the citizen has a retirement pension 2 No: we could find the citizen, but he doesn't have a retirement pension 3 No: we couldn't identify him, because there are several matches in our databank 4 No: we couldn't identify him 5 Technical error
Contact details?	Pension provider	Answers the question who is responsible for the pay out of your pension.	(Organisation) responsible for the management and payment of your pension + contact details.
Contact details?	Pension organiser	Answers the question who is responsible for organisation and financing of your pension.	(Organisation which) offers a pension scheme or pays contributions for your pension. Often your employer or sector/industry.
How much?	Pension amount: DC-plan	Vested reserves	Accrued entitlements or accumulated capital taking into consideration the specific nature of the pension scheme. In nominal value of today's money. In national currency (if applicable) + EUR.
How much?	Pension amount: DB-plan	Entitlement	Targeted amount with no new premiums. In nominal value of today's money. In national currency (if applicable) + EUR.
When?	Retirement age	Age of the user on the pension date / age of the user on which he can receive his/her pension	Statutory retirement age, retirement age laid down in the pension scheme or estimated by the pension provider, or the retirement age set by the member. Age used to calculate the projected pension benefit.

Table 1: Tentative data model of the ETS' Pension Tracker: overview of definitions

To conclude this chapter we will give a short overview of the challenges we encountered in defining a data standard for the 'how much' question.

Challenge: make pension amounts comparable and comprehensible

Pension entitlements are designed in various ways both in state as occupational pensions. How can we create a view that is comparable and comprehensible for the citizen? How can we translate this in a clear and comparable definition of the pension amount to be shown on the ETS' Pension Tracker?

In the tentative data model the following choices are made:

- There is a different definition for defined contribution (DC) and defined benefit (DB) plans: vested reserves in DC-plans, entitlements in DB-plans.
- For both definitions the focus is on what is sure/acquired today, so on the current value of the pension entitlement, on the retirement age/date as shown, *without new premiums.*
  - For most mobile workers, we can suppose the pension plan is dormant, but if the pension plan is active, this requirement of not projecting future premiums can be challenging for the NTS/data provider

Moreover, if all amounts are expressed in the same currency, the logic tendency of the citizen is compare or even add up the different pension amounts. How can we ensure that the citizen gets all information so the result of his comparison is reliable enough, in terms of in line what he can expect in real life? But also that the citizen is aware of potential pitfalls or specificities?

Throughout the workshops the awareness is grown that next to the common definitions, the data model should also leave room for **contextual information** the data provider can/should provide with the data so that the user can better understand the figures shown on the screen. For example: more information on the periodicity of the pension payment (one time lumpsum, monthly annuity,…) or the payment duration (life long, specific period,…).

To conclude, both the work on elaborating the definitions of the data model as on deepening the data model with contextualisation possibilities are key success factors for the actual implementation of the Pension tracker's product vision.

The contextualization with tailored information is described in Chapter 1.7.1 whereas the ETS frontend setup is explained in Chapter 2.4 'ETS-ecosystem'.

The story of 9

The ETS association is founded by nine actors in the pension sector

3. **WS3:** ETS organisation – concept and initial setup

> **The ETS, when successful in the years to come, will go through many stages of development from the perspective of user engagement, stakeholders' involvement, services provided, technology used, etc.**

Each of these stages will come with its own requirements and challenges for the ETS organisation. This is in line with the vision of EIOPA that pension tracking systems (PTS) and the ETS should be developed in a step- by- step approach as well as with our project proposal.

But it also means there is not a single image of the future ETS organisation. With this in mind, we decided to construct the image of the ETS organisation corresponding to the first ETS version. That is (where functionality and number of connections is concerned) the very first phase of the ETS, one that has the potential to develop further, but already has a sustainable structure.

Also important to note is that the findings of the TTYPE report with respect to the ETSs organisation did form an important starting point for many of the discussions and research of the project. We did discuss and validate the concepts and suggestions put forward in the report, but many of the basic ideas remained unaltered.

3.1.　　　　Need for an organisation

The need for an organisation developing and operating the ETS was already addressed in the TTYPE report. Apart from the operation, all tasks related to the legal owner- ship of the ETS also need to be taken care of. Finally, given the dependency of the ETS on other European organisations (for example data and content providers), stake- holder involvement needs to be organized as well.

The properties of the ETS organisation as they are reflected in the business model, the governance model and the legal structure depend on its purpose.

3.2.　　　　Purpose and dependencies

The purpose of ETS has been (indirectly) defined by the EC in that there is a necessity for mobile workers to be able to track and trace their pensions. The project consortium shares this assumption and has expressed this in the ETS vision and mission. So, the goal of the ETS organisation is to develop and operate a service that does just that.

At the beginning of the project, we defined a mission and vision for the future ETS organisation:
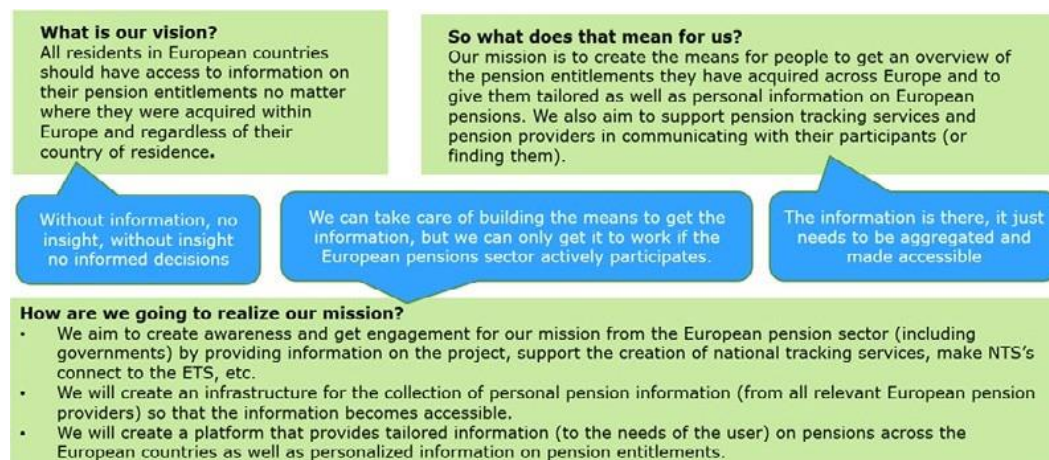
Figure 29: Mission and vision for the future ETS organisation at the beginning.

Starting from this mission we used the following model to explore aspects of the ETS organisation and of its services. It is to show the dependencies between several aspects of the ETS organisation and how the business model of the organisation is related to the services provided by the portal.

EC: labour migrants need to be able to track and trace their pensions.

Challenge

EC: an EU portal that gives EU citizens information on the pensions they accumulated across the EU: the ETS.

Solution

Solution needs to be built, developed and operated by an organisation

Organisation

Mission, vision,

Portal

Application

provided

Value proposition and how to deliver

CMS, auther etc.

Infrastructure

Organisation and governance model

Activities, resources, costs and revenues. Partners

Data   Content   Personal pension   Legal structure

Legal shape Statutes

Figure 30: Further exploration of the mission – the relation between organisation and services.

This model roughly describes the approach we are taking in defining the future ETS organisation. The strategy describing the way it wants to achieve the goals, the busi- ness model describing the value proposition of the ETS organisation (to a large part provided by the ETS itself) and how it will deliver it. Then the organisational and gov- ernance model to describe how the main tasks (Operation, ownership, stakeholder management) are carried out and finally the legal structure of the organisation.

3.3.   Digression: External Developments

The original ideas on the ETS were developed in 2013 and 2014. Many things have changed since then, but the basic idea of the ETS, being a portal that would provide pension information on entitlements accumulated across member states has not changed. The project does not have the impression that the ETS concept is outdated, or its necessity is less urgent. But it does recognize the possibility that legal, techni- cal, social or other types of developments could change the ideas about the challenge or about the ETS as a solution. Therefore, we did an exploration session to identify developments that could have an impact on the future ETS in either a positive or neg- ative way. This kind of monitoring the conditions that influence the business model, should be an ongoing part of the management of the future ETS organisation btw. The tree most prominent developments in our eyes were:

- We see several new NTSs being established in Europe. Examples are Germany, the UK, Croatia, Austria. This of course supports the foundation of the ETS where it needs NTSs as data sources. But it also shows that the concept of giving a comprehensive overview of an individual's pension situation is still a very convincing solution. The ideas behind the new NTSs are also interesting because they all did thorough research on the structure of current NTSs in other countries. Of course, they had to modify the design to the specific properties of the pension industry and needs and priorities of citizens in their own countries and fit it into the dynamics and interests of their stakeholders. So, for the ETS they are an important learning ground.

- Another observation is that we see existing NTSs have an internal focus, meaning that they are driven by national developments in pensions, have national stakeholders and are financed either through state funding or through national players in the pension sector. Their agenda is based on what happens in their member state (changes in legislation, topics of national interest, etc.) and the interests of their stakeholders. For most of the NTSs, mobile worker form only a small portion of their users, so facilitating them is not the highest on their priority list. This of course does not help if the ETS seeks the engagement of NTSs.

- One development with significant impact is, that citizens are getting increasing control over their own data, particularly data that is held by organisations and governments. We see legislation on PSD2 and GDPR as an example and the EC's open finance strategy as another. For citizens this means that pension data will be available through a multitude of channels and that offering pension data might become subject to businesses of more service providers. One example of that is NTSs building API's (Denmark, Netherlands) that make data transfer to other organisations possible, another example is that of screen scraping tools. These tools interact with existing applications to read the data that they show on the user interface which can then be used for other purposes. Websites like NTSs have no influence over their use because they behave like users accessing the website.

Conclusion:

For the ETS it is important to realize that it might not have the monopoly on pension data that it gets from data sources like NTS's. Equally important is the notion that mobile workers need information and answers rather than raw data. This is important for the ETS's strategy and underlines the necessity of contextualisation of data for the mobile workers. One finding of the project group's discussions on this issue was, that the ETS will have to move fast and establish a strong position in the field of pension communication to citizens ahead of this development or change its proposition

3.4. Value proposition and business model

The basic idea of the ETS is to help mobile workers assess their pension situation so that they can act upon that information. ETS does that on basis of personal pension information that is explained and contextualised as well as the tailored information, contact data and recommendations in order to activate the mobile workers to deal with their pension situation. So that describes the value proposition for the user.

But the ETS will be dependent on NTSs and pension providers providing data and supplying content. If there is no legal obligation for them to do this, they will need an incentive. One incentive could be that the data the ETS has accumulated could be transferred back to data providers if requested. A construction like that could make it possible for a citizen to log on to his national tracking service and have it connect to the ETS and gather the relevant pension data from other member states. An ETS with this functionality does have an additional value proposition, one of a datahub for NTSs.

The options for the ETS on value propositions are summarized in the diagram below. Notice that the two bottom layers describe the ETS in its basic form as defined by TTYPE and de project proposal.

			Value proposition	Opportunities	Revenue options
ETS as a data hub	4.		Providing personal pensions data to other organisations (on basis of user consent)	• Opening for a wide range of services	• Advertisements • Subscriptions (of commercial vendors) • Fee per data-transaction
	3.		Providing personal pensions data to pension providers and NTS's (on basis of user consent)	• Opening other trusted channels for information provision on personal pension situation • Incentive for providing data	• Pension providers and NTS's. Membership fees or other forms of yearly contributions
ETS as a portal	2.	ETS level 2	Providing comprehensive overview on personal pension situation	• Basis for all evaluations of personal pension situation	
	1.	ETS level 1	Providing general pension info, answering questions, find my provider, etc.	• Building knowledge base on pensions across Europe and on questions of labour migrants • Bringing (lost) members and providers into contact	• Public funding. Primarily EC • Funding through other organisations that feel strongly about the goal of the ETS.

Figure 31: Value proposition and business model – opportunities and revenue options.

For the project it was clear that, though levels 3 and 4 offer clear additional value for future stakeholders, they also come with a cost.

		Value proposition	Issues	Legal issues
4.		Providing personal pensions data to other organisations (on basis of user consent)	• Commercial application of the data (= organisations making money on the data that is provided by the ETS community)	• Contracts
3.		Providing personal pensions data to pension providers and NTS's (on basis of user consent)	• Misuse of personal data if it falls in the wrong hands • What do pension providers and NTS's (data receivers) do with the data?	• GDPR data receivers • Agreements between ETS and data receivers about liability, use of data, etc.
2.	ETS level 2	Providing comprehensive overview on personal pension situation	• Identification of users • Making it consistent, complete, useful and simple	• Legal restrictions data providers • GDPR ETS organisation including user consent
1.	ETS level 1	Providing general pension info, answering questions, find my provider, etc.	• Liability in case of incorrect info	• Establishing ETS organisations as legal entity • Terms of use

Figure 32: Value proposition and business model – issues and legal issues.

Assessment of the different value propositions

The data hub business has been discussed within the project. Conclusion was that this is a logical extension to the ETSs basic value proposition and should therefore be part of its future service. However, at the same time this functionality would present the ETS with legal (GDPR), security and political barriers that could discourage NTSs from connecting. So, this option, even though interesting and in the future maybe even unavoidable, was left out for the first scoping of the ETS in its initial phase.

When focussing on the ambition levels 1 and 2, the project initially defined a value proposition for users based on a concept of the ETS, like an NTS but on a European level. This value essentially was: Presenting a comprehensive[22] overview on the per- sonal pension situation in addition to providing general pension info focused on the situation of mobile worker. Research of WS2a has shown that this ambition level of comprehensiveness is not feasible in the short term. Reasons for that are:

1 There are many differences in the information NTSs have and present to their users (some show projections, others do not, some show a survivor's pension, or the combined pensions of partners, some show only DC plans, others both DB and DC plans). Being dependent on the data that NTSs will be able and want to share, on the short term the ETS will need to be looking for a common denominator in terms of the information it can show. In practice this means it will only have a reduced set of functionalities when compared to most NTSs.
2 Since you need to define standards for every bit of information provided, the

. . . .

22 Comprehensive in the same sense as NTSs with a detailed pension overview on all details of pension entitlements

more information is put into the ETS, the more standards you need. That could become extremely complicated and labour intensive because it requires a lot of tuning.

We think that giving a comprehensive overview is not the only way to help mobile workers. If the first need for mobile worker is to know if they accumulated a pension in a specific country, get an impression of how much it is, get some basic questions answered and get help in exploring it deeper, this could be a very good start.

Starting from that viewpoint the basic value proposition for the ETS (with respect to citizens) becomes:

Providing basic information on pensions accumulated across the EU and helping the individual in answering their primary questions on these pensions.

This value proposition can form the basis for a business model that could look like this:

Key partners	Key activities	Value propositions	Customer relationships	Customer segments
• Pension data providers like NTSs • Content providers • Funding partners	• Developing and improving user interaction and ETS services • Developing and improving pension system content content • Connecting NTSs	*Individuals* • Help individuals in finding accumulated pensions or pension entitlements in European member states • Answering basic questions • Help in getting more detailed information	• Automated	• Mobile / cross border workers, European citizens • NTS's and pension providers
	Key resources • Structured content on pension systems across member states • Personal Pension data	*NTSs* • Extra channel for labour migrants, that redirects them to NTSs when they have questions or need additional info	**Channels** • ETS portal • NTS portals	
Cost structure • Customer research • Development of the platform and the connection concept • Maintenance of the platform • Connecting NTS's • Finding and contracting new members			**Revenue streams** • EC • Other sources of public funding • NTS's • Membership fees	

Figure 33: Draft version of the business model.

Conclusion:

This business model needs detailing. It is clear though that finding a sustainable and sufficient income stream is going to be a challenge if it is primarily dependent on contributions of private institutions including NTS's. The reduced value proposition makes the construction of the ETS less complicated and more feasible. But at the same time, it reduces the number of opportunities for finding revenue streams because the added value it delivers focuses on individuals and has less to offer to participating organisations, making it less interesting for many organisations to invest in and fund. On the other hand, pursuing own interest of participating institutions may not be in line with the understanding of pension tracking systems defined by EIOPA in 2021, meaning that a business model that is built on private funding only or as predominant financing does not fulfil the requirements posed by EIOPA.

EIOPA has looked at governance models for PTS's **and is of the view that a well-governed PTS will foster citizens' trust and should therefore be underpinned by principles of good governance listed below:**

- Non-profit
- Independence
- Credibility
- Transparency.

Pension Tracking Systems are labelled by EIOPA as a 'public good'[23]. **The public good attributes of a PTS would rule out a commercial governance model such as privately-owned, for-profit entities, hence leaving two possible governance structures of non-profit PTS: a public entity and a public–private partnership. In EI-OPA's view, the public-private partnership model provides ad¬ditional advan- tages such as pooling together resources, expertise and innovation from both public and private sectors and fostering the involvement from representatives of pension funds and providers.**

In case the EC embraces this consideration, it means that the development and oper- ation of the ETS could be understood as a public task. Furthermore, this could lead to the situation that providing data to it could become less voluntary. However, the considerations of EIOPA on principles of good governance are in line with what we already considered earlier when exploring the governance model.

Organisation and governance model

The organisation form of the ETS should supports its business model.

Basic starting point (also partly mentioned in the proposal) for the governance and organisation of the ETS:

1. It should be a structure that incorporates stakeholder involvement, legal ownership and operation of the ETS services
2. It should have a governance model in which members govern the ETS organisation
3. It should be non-profit, not owned by others and financially independent
4. It should be ready for expanding to other value propositions (like ETS as a data hub)
5. Several options for the legal form were suggested: including the German association or Belgian non-profit society.
6. The initial setup should be simple and practical but with future growth in mind.

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23   In the technical advice of EIOPA, No. 22, page 11/116, EIOPA states:" In fact, a PTS as a **trustworthy 'public good' (**see section on governance) can help people better trace their pensions (minimise the risk of 'lost pots' and hence unclaimed pension entitlements), trust in the pension system through greater transparency, provide them with information to engage with their pension fund (e.g. increase contributions), and facilitate financial planning. **Nearly the same scope and goals also hold true for the European Tracking Service (ETS)**.

The basic idea behind the organisation was that national PTSs and pension providers do not just connect to the ETS. They would become a member of the ETS organisation and, consequently, get direct influence in it. Another consequence would be that by appropriate membership regulations, much of the groundwork for a legal basis for exchanging pension information could already be done.

The starting point for our decision-making process on the legal form was the ETS project proposal which stated that the ETS could have several legal forms: "the limited liability company, the association and the foundation." In order to arrive at the best result, we developed exclusion criteria (again on the basis of the ETS proposal) which corresponded to necessary characteristics which the ETS should have. The registered non-profit association according to the German civil code scored the best on all of the criteria

Exclusion criteria	Definition
Not for profit	A legal structure which allows us not pursue economic profit targets.
Flexible shape resp. body	A legal structure which provides leeway in designing the future ETS and supports the basic underlying principles. (TTYPE/ETS Proposal).
Easy access for possible partners	A legal structure which allows growth resp, the incorporation of possible partnersin the future ETS.
Easy to set up	A legal structure which allows am effective and quick founding procedure with few administrative barriers.*
Cost oriented	A legal structure which offers the possibility to keep costs as low as possible (No starting capital, low funding costs).

Figure 34: Exclusion criteria and how these are defined.

So, the basics of the proposed governance structure were:

- The basic legal structure is a registered association according to German law
- The members of the association define its purpose and direction. Membership is voluntary
- The association has statutes that describe the organisation's goals, governance and regulations and the members responsibilities
- Members meet and decide upon key issues in the General Assembly
- The General Assembly appoints a Board that monitors the realisation of the organisation's goals.
- NTS/PTS committee is built to secure participation in decisions regarding data exchange and presentation

3.5.　How we developed the initial ETS organisation

After the two main products of the project were essentially developed in 2021 and regular discussions with the circle of national PTS had taken place, the work for the **establishment** of a supporting organisation could begin. The project proposal (page 60) already foresaw that at a given point during the project the entity would be officially established, and tasks and responsibility should be carried over from project partners to the new executing ETS organisation.

In September 2021, members of the project group discussed the issues of governance and business model in the light of the external developments described above (see 3.3), as well as EIOPA's draft TA on Pension Tracking and its implications. The results were summarized and discussed by the PSC members in October 2021.

The PSC agreed that the EIOPA consultation paper "Technical advice on the development of pension tracking systems" provided valuable input for the governance of the ETS organisation and that the EIOPA's findings essentially confirmed the results of the WS 3 work regarding the governance model. Furthermore, it was concluded in the meeting that following the "public good" considerations of EIOPA, the ETS with its already established deliverables and products would need a holder organisation to promote the service and apply for the necessary financial resources to run and manage it. Finally, as it was now a matter of completing the project tasks, the PSC agreed upon setting up a task force, to draw up a concept and discuss the conditions and details of the organisation to be founded in 2022.

A first concept of the taskforce was sent to the members of the PSC at the beginning of the year 2022, followed by a set of bilateral talks, in order to compile the basic principles and decide on the next steps to set up the association. During a meeting held in Rolduc in the Netherlands, the project partners managed to agree on the first elements and open issues were put on the table to be reconsidered. A general governance model was included in the intermediate report to be delivered to the European Commission in spring 2022, published in summer on the FYP website. By May 2022 the task force had drafted a detailed first edition of statutes together with an explan- atory memorandum on how the management and liability of an association under German law is constructed.

After a process of finalizing the statutes together with legal and tax consultants, the decision on the first set of ETS statutes could be prepared and clarified internally by the single institutions forming the project consortium.

Most important elements and characteristics of the ETS association to be founded

The following preliminary considerations played a role in the choice of a suitable organisational form: The initial ETS organization should be structured as a lean and effective organization, but scalable for the requirements of the ETS to be developed later with more members and connections. Therefore, it was suggested to choose a registered association under the German Civil Code as the legal form. The currently existing European legal forms were examined, but could not offer a more suitable framework. The only alternative was a Belgian non-profit association. For project-organisational reasons, the association under German law was suggested. To set up a German association, seven founding members are necessary. The ETS consortium comprises eight members. Therefore, the basic consideration was, to found the association together with the consortium members.

The legal form of an association (eingetragener Verein) provides the necessary flexibility to allow for growth and development, as well as cost efficiency, which is of course reflected in the governance model. The association needs a non-commercial purpose to be acknowledged as non for profit. The purpose has to be defined clearly in the statutes.

Preamble of the ETS Statutes

Understandable information on various national pension schemes and different sources of retirement income, whether public or private or private-public, within Europe should be publicly available. Moreover, every person should have access to information on its pension entitlements acquired within Europe regardless of such person's country of residence and no matter in which European country these entitlements were acquired. Therefore, a pan-European pension tracking system shall be established and continuously developed. In line with the advice of the European Insurance and Occupational Pensions Authority (EIOPA) to the European Commission on the development of pension tracking systems, the main goal of a pension tracking system is to provide an overview of individualized, objective and impartial information to the users about their accrued entitlements and projected retirement income provided by various pension sources in a simple and understandable manner. This shall also contribute to a sensible decision-making and sound financial planning of the individuals for their retirement. Creating transparency, in cooperation with national pension tracking systems, about retirement incomes available and accrued across Europe also promotes the free movement of people and workers within Europe.

Necessary bodies prescribed by law are the General Assembly and the Board. The governance model has to be laid down in the statutes. The ETS statutes foresee 4 bodies of the association:

1 The General Assembly
2 The Board of Directors including an Executive Board
3 The Advisory Committee
4 The PTS (NTS) Committee

The structure of the governing bodies and other roles are described in the organisation chart below:
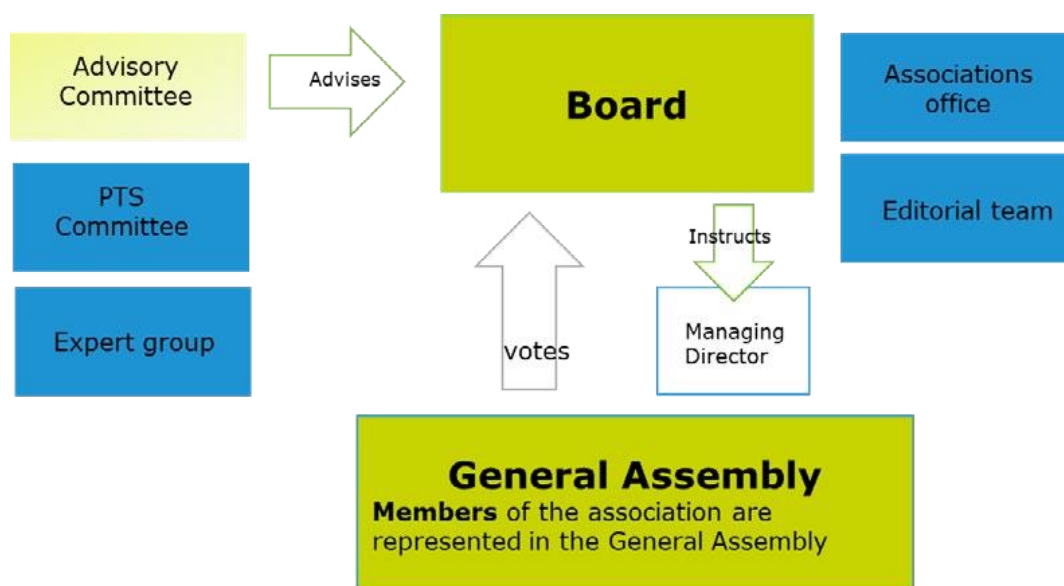
Figure 35: Structure of the governing bodies and other roles

1)   The General Assembly

The members of the ETS association form the General Assembly[24] . Membership will be open for stakeholders from all pension pillars, private and public entities engaged in the process of pension administration (primary process chain, no consultants). Members would be only legal entities from public and private sector because we believe like EIOPA in the advantages of a public private partnership that brings together the best competences and practices. A public private partnership ensures an exchange between stakeholders as well as the different sources and categories of pensions. Additionally, it is guaranteed that neither national nor single stakeholder interest would determine the strategy and business model **to ensure that mobile workers are in the focus of the ETS.**

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24   The General Assembly can be competent for:
  • Control of the Board by accepting the annual report and finances
  • decisions about the budget for the coming year
  • changes of the purpose of the association by approval of all members
  • changes of the statutes

Members of the ETS may participate in the work of the association differently, depending on the engagement in connections or content provision. In addition, all members will be charged a membership fee to be defined. In exchange they will be able to join the work of the ETS work groups on best practise in pension communica- tion etc. **However, membership fees will only cover the very basic costs of the ETS. To fully develop and evolve, the ETS will need public European funding.**

The draft statutes define the members of the ETS association as follows:

§ 3   Acquisition of Membership

1 Membership is open to national Pension Tracking Services. National Pension Tracking Services (PTS) are public, or private or public-private entities, irrespective of their legal form, who offer digital services which can be accessed by nationals and other eligible persons in order to receive personalized information about their respective pension entitlements accrued in countries of the European Union and/or of the European Economic Area. To this end, a PTS brings together information and data coming from all or a major part of the statutory, occupational and/or private pension providers in a given country.

2 Membership is additionally open to private and public or public-private institutions, irrespective of their legal form, providing and/or administering pension provisions. These institutions may cover statutory and complementary as well as supplementary, occupational and personal pensions. Examples of such institutions are:

     a (a) Statutory pension institutions.
     b (b) Institutions of complementary or occupational retirement provision.
     c (c) Institutions, that offer personal pension products.

3 Membership is also open to organisations as well as associations professionally dealing with the topic of pensions.

2)   The Board of Directors

The responsibilities of the Board of Directors are described in the Statutes. The management of the ETS in the early initial phase will be provided by one or two members of the Board who are elected by the entire Board as first and second chairperson taking over the role of the Executive Board respectively be the legal representatives of the ETS organisation[25]. At a point to be defined when business is increasing, a managing director would be hired who will be delegated to take over the tasks of the daily management und would not be a member of the Board. All tasks and competences will be described in the statutes.

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25   The term "Board" according to the German law on associations means "the legal representative" of the association. The Board represents the association judicially and in- and out-of-court.

In order to ensure a balanced and competent representation by the members of the Board, its composition should be defined in the statutes of the association according to certain criteria. For this reason, the statutes stipulate that the Board shall be composed of a fixed number of representatives from 3 categories: Representatives of National Pension Tracking Institutions (PTSs), an equal number of representatives of pension insurance institutions providing or administering pension benefits, and a representative of other organisations/associations dealing with pension provision. In addition, a maximum number of possible representatives of a country can also be specified in the statutes, so that a balanced representation is achieved. This ensures that neither national interests nor the interests of individual stakeholders determine the strategy and business model of the ETS to ensure that mobile workers are at the centre of the ETS.

The balanced Board composition fixed in the statutes leads to the fact that members' passive election right is in a way restricted. This way any "takeover" e.g. of private pension industry or any unbalanced country representation can be avoided. The proposal on the regulated composition of the Board is inspired by settlements of the Steering Committee of the newly established German agency for digital pension overview.

3)   The Advisory Committee

Furthermore, the suggested statutes comprise the establishment of a small Advisory Committee in order to ensure participation of important stakeholders that do not fit in the categories defined for the Board of Directors composition. For example, consumer representatives, social partners, representatives from science and research as well as European authorities. The Committee may assist the Board in achieving the objectives set in the statutes by making recommendations.

Expert groups may assist the Board in technical questions and/or may undertake tasks which were assigned to them.

4)   The PTS (NTS) Committee

The 4th body is a specific PTS committee which will have an important role in the decision process regarding the data model and data transfer conditions. In the beginning of the project, it was proposed to address mainly PTSs and gain them as members for the ETS (meaning also in the managing body). Admittedly, the national PTSs play a vital role for the ETS but they have completely different forms of setups and governance. Therefore, it will be in the sphere of the PTSs and their stakeholders to decide on the representation in the ETS and that may complicate the process of membership.

Furthermore, the statutes foresee a defined representation of a certain number of PTSs in the Board but among other stakeholders. This way, the participation of PTSs is secured but without overwhelming them with the responsibility for the development and management of the entire ETS.

In our point of view, this proposition is ideal. It is ready for enlarging the number of members but not too complicated in governance and management. On the one hand the membership is not limited to PTSs but at the same time, we make sure that this group is well represented and has an impact on the decisions regarding transmission of personal data. This also fits in with the fact that the ETS is not a copy of a national PTS. The European pension overview is mainly composed of data from the connected national PTS, but has its own focus and features. The aim is not to create a further European service in addition to the national services, but a service that is dedicated to the needs and special features of an international career and thus also represents a necessary supplement to the national PTS.

3.6. Financing the ETS and risk mitigation

The statutes of the ETS Association regulate its possible income: Membership fees, donations and funding from public donors. As already mentioned, EIOPA outlines in its report that the principles of good governance mentioned above will foster the citi- zens' trust in a pension tracking system. The qualification or definition as public good is justified among others through the fact that PTS provide services for citizens freely accessible as well as "free from any inappropriate influences and constraints…" of providers. This assessment leads to a change in the basic assumptions that still influ- enced the business model in the TTYPE project which assumed a potential service provided voluntarily and under the exclusive financing of certain providers. In order to reach long-term financial self-sustainability, this would by nature require that the providers also acquire a significant measurable value through this.

EIOPA's assessment confirms that a service that is above all, independent, non-for-profit, credible and transparent does not at all just serve the interests of its provid- ers and cannot be financed purely privately unless there is a legal obligation on the providers to make it available. However, such a legal obligation does not yet exist for a European service. Furthermore, EIOPA points out that even with a legal regu- lation, co-financing of the TS by the public and private sectors guarantees freedom from conflicts of interest and neutrality of the information provided. In this respect, although it is not necessary to organise a public ownership of the ETS, in the view of the consortium members, it is necessary to organise a private-public funding. Considering the additional costs to those already existing at the national level, espe- cially for the PTS, but also for the providers behind it, public funding must for this reason make up the vast majority of the revenue. This is further underpinned by the non-for - profit status of the ETS association.

Looking forward to the rollout phase of the ETS this means that the terms and con- ditions of any funding agreement should consider the fact that association mem- bers are free to join and leave the association, albeit subject to certain deadlines. Therefore, it has to be acknowledged that the community of members will have to make sure that they will not be exposed to inadequate financial risks.
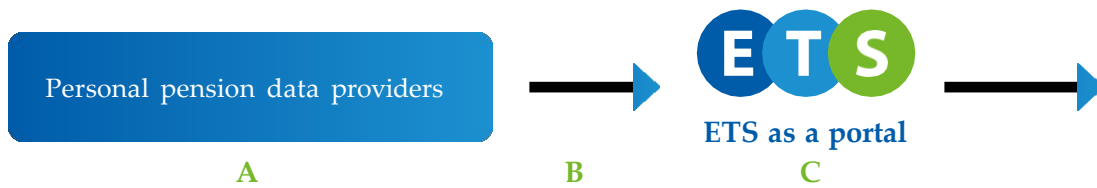
3.7. ETS and GDPR compliance

Figure 36: Legal restrictions.

Introduction

The ETS gets pension data from data providers (mostly NTSs) and presents them to the individual that requested information. So the ETS processes personal data. Looking at it from a compliance perspective, there could be several legal restrictions in play here:

A Legal restrictions that apply for the data providers with respect to processing the data
B Legal restrictions that apply for the data provider to transfer data to the ETS
C Legal restrictions that apply for the ETS to process the data

In all cases, GDPR applies. In addition to that, additional national legislation may apply as well. Realizing that this topic is very relevant for the ETS and that legal restrictions could hamper the ETS's development, the project decided to dive more deeply into this topic. The purpose was to explore the options for a solid legal frame-work for the ETS's operation and development.

So we did a survey with legal experts from different member states (Denmark, Netherlands, Germany, Belgium, Sweden, France) to see how legislation and particularly GDPR, helps or hinders the operation of their national (future) NTS and how they deal with it. We also looked into how these NTS's legitimise their own processing of the data (topic A) and the possibilities for exchange of the data with the ETS (topic B).

After the evaluation we shared the findings with the data protection consultant that analysed these and the legal position. The expert opinion is attached to the report and recommends to conclude a processor-controller-contract. So the NTS are the controllers and the ETS is their processor.

These structure enables the NTS and ETS to work closely together and illustrate the structure of the ETS in that the NTS are involved stakeholders.

Furthermore it is also possible to develop the data protection structure with a possible ETS structure. Should the ETS get a legal basis in future, the structure could be changed to a collaboration between responsible parties with the consent of the stakeholders.

The story of 30

Find Your Pension soon provides help to all mobile workers in thirty European countries

4. WS4: Building the ETS-network

> **Setting up the Pilot ETS is not just a technical exercise, it is a real communication challenge as well. The project proposed by the consortium included an extensive communication strategy towards existing and potential stakeholders (such as NTSs, pension providers, pension funds etc.) and end users (individual pension plan members) during the course of the project.**

Objectives of this communication strategy are:

- Raising awareness
- Mobilizing relevant stakeholders
- Striving for broad interest
- Buy in of pension providers and NTSs without forgetting the wider community of pension stakeholders.

A corporate design was created and is used for the project communication including logos, defined colors and font, a standard presentation and a mood board. At the same time the website has to find its users. The users of the already existing FYP website (approximately 100.000 users annually) will be informed about the new ETS and probably be its first customers. To gain the attention of additional users a communication strategy is needed for the roll-out-phase that involves associations of

certain professions and employees as well as employers and branches where professional mobility is a given fact. Those stakeholders are the gateway to address the mobile workforce in Europe.

The story of 10 million
Connecting all mobile workers in Europe. Will you join us?

In 2022 a new communication strategy was created in order to clarify the need for FYP. A new strategy was needed to present a solid roadmap, creating clarity and a spot on the horizon for all stakeholders and to establish a foundation for communicating and engaging with data partners on the ETS association. The strategy is based on appealing stories to clarify the need for FYP. These stories are supported by a remarkable and recognizable creative concept and laid down in an integrated content plan (expressions for LinkedIn, DM, Advertisement in professional literature, etc.).

This strategy led to a campaign to raise awareness of stakeholders. This campaign 'The story of' tells, using stories behind the numbers, where the ETS stands for and makes an appeal on stakeholders to be involved. The campaign was launched during the 'ETS project event featuring the EU forum on pension communication' in Berlin and was well received.

At a later stage the campaign can and will also be used to inform end users about the ETS and FYP and how it can be used.

4.1. Raising awareness and mobilizing relevant stakeholders

End users
In order for the project to start communicating with potential end users first more general (and personal) information, see PoC and Portal, on pensions in different

member states has to be included. Through the portal we still communicate with the existing end users about the progress of the project, events and portal updates.

During the development of the new Find Your Pension-portal, which went live in Q4 2021, several user-tests were held to check the user-friendliness of the portal and the information communicated through the portal.

Stakeholders
Since the start of the project involving stakeholders in the (technical) development of the portal and information provided through the portal was an important part of the project.

Therefore, the project started with identifying the stakeholders for the ETS. These are on a national level: National Tracking Services, Pension Providers, National Pension Federations and Ministries of Social Affairs. On a European Level, stakeholders are: European Associations like AEIP, Pensions Europe and insurance Europe, European Social Partners like Business Europe, European Trade Union Confederation and European Construction Industry Federation. Last there are the international organizations as NGO's, ILO and OECD Working Party on Private Pensions. The project didn't involve this last group of stakeholders so far.

Also, decision makers on a European Level were identified as important stakeholders for the project. Since the beginning of the project members of the project have been frequently in touch with DG EMPL/VISMA, EIOPA and OPSG, European Parliament and Presidency of the European Council in order to keep them updated on the pro- jects developments and providing input on for example pension communication.

PTSs
As the ETS-project depends on data and information provided by NTSs much effort throughout the project is put in having them involved in the development of the por- tal, technical-, data- and communication standards and governance model. Surveys and bilateral talks with NTSs from different member states were used to get input on technical-, data- and communication standards and the governance model of the ETS.

The information retrieved through the surveys and bilateral talks was periodically discussed in NTS meetings, which were also open to other stakeholders, to get a com- mon sense on the development of the ETS. The meetings were also used to update the NTSs on the progress of the ETS-project and share best practices between NTSs. As we see it the NTS meetings are a forerunner for a forum on pension communication.

In 2022, founding of the ETS-association became in focus. Contacts with the French, Dutch and Danish NTSs became more eminent. Not just to get these NTS's more aware of the ETS state of play, but also to get them involved in the ETS-organization from the start or at the early beginning.

4.2.   Broadening the horizon

To get other stakeholders involved in the ETS-project the project also invested in research on pension communication and pensions across borders (which difficulties do mobile workers face). The research reports were published and sent to different stakeholders, participants and other interested parties. To reach a broad audience the reports were made public during special events, mostly webinars, on the topic researched. In 2021 the project organized a webinar during the European Retirement Week. During the European Retirement Week, which became a recurring event on the event calendar in Brussels, the associations aim to provide a platform for a wide range of stakeholders to debate the future of pensions in Europe and to raise citizens' awareness of the need to save for retirement. During the European Retirement Week in 2022 the ETS-project will host its final event.

Forum on Pension Communication

We will continue the various exchange with different stakeholders. The ETS will hereby serve as a Forum on Pension Communication as mentioned in EIOPA's technical advice on the development of NTSs. The input from various stakeholders can be combined in order to work on technical aspects of providing personal data as well as offering tailored information to enable the citizen to understand and take action. Figure 38 shows the institutions which can deliver input for the forum as well as the possible outcome and benefit of the exchange.
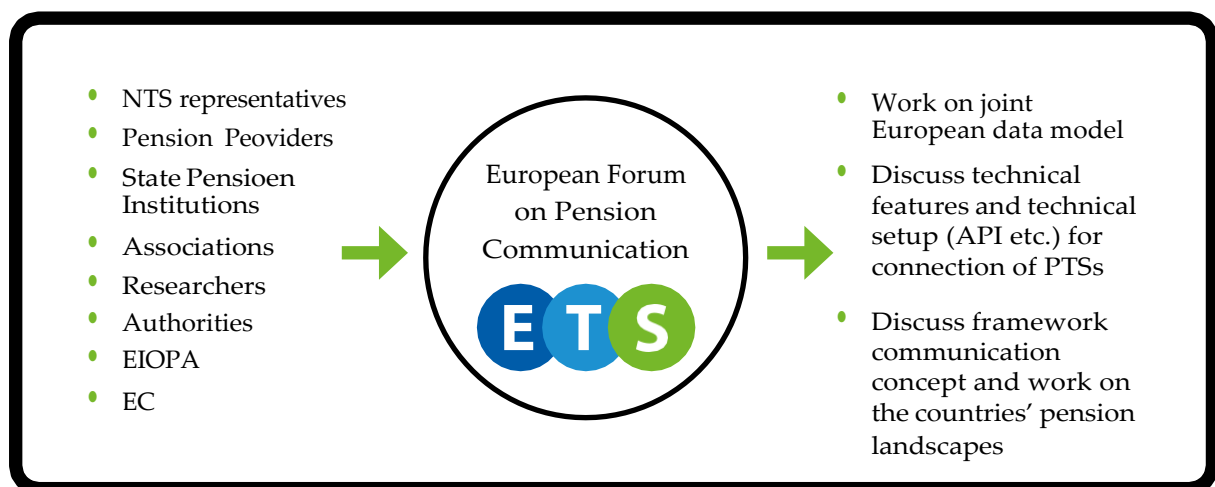
Figure 37: ETS European Forum on Pension communication.

Outlook to 2023 and further

On January 1st 2023 the ETS association will formally start. This will be announced during the final event in Brussels. After its start, the ETS association will aim to attract more NTSs and pension providers to become involved. Not only to share data using the PoC (for NTSs), but also to exchange ideas/best practices in the Forum on Pension Communication and work on the communication strategy and campaign to make sure the end user will became more involved in and informed about ETS.

The story of 2023

The year ETS will start. Will you construct the future with us?

Events

During the cause of the Project, the ETS has been presented on several events and meetings. Some examples are listed below.

- ETS Kick-off-event
- 3 Webinars on pension communication
- 3 Open information meetings of EAPSPI
- 3 European Social Insurance Platform (ESIP) pension committee
- Mutual learning session on CMU
- Technical Assistance and Information Exchange (TAIEX) meeting
- European Association of Paritarian Institutions (AEIP) conference, 2 AEIP work group meeting
- Several ETS/NTS meeting
- The Employment and Social Innovation (EaSI) conference
- German Association of Insurance Law and Design (GVG) conference, 3 presentations at committee meetings
- ETS project event featuring the EU forum on pension communication
- ETS Final Event: Ready for Take-Off! During the European Retirement Week

Examples publications:
- 8 Newsletters
- ETS survey 'Digital pension communication in Europe – state of play 2019
- 3 IPE articles
- 3 press releases
- 2 European Pension articles
- • Brochure about ETS
- • 10 LinkedIn-posts

The story of 2023

The ETS association is about to start. Will you join us?

5. Towards the fully functional ETS

5.1.   Setup of the ETS: The first steps are taken

The ETS Pilot is built. At the end of 2021 we created the important building blocks for the ETS with the FYP Portal. In order to support users in finding their pension provision and acquired entitlements, even with their professional career in different countries, two elements are important:

First, comprehensible, and tailored information that answers the users' most important questions and encourages them to take necessary actions such as account clarifications. Secondly, a pension tracker that helps users to find their entitlements and get an overview of how much they are. An important prerequisite for compiling the personal information via the ETS is of course that the existing PTSs are "connected".

Progress made in the ETS setting. To connect more data sources (PTSs), the technical means of APIs remains the most appropriate way and developing an interface does not present a big issue. According to EIOPA's Technical Advice financial support would also be possible[26]. Furthermore, both according to EIOPA and following our discussions with the PTS group, thePTSs should use an authentication method recognized in the eIDAS framework to enable mobile users to access the national systems directly or through the ETS. The emerging systems in Germany and Austria will fulfil this requirement from the very beginning.

The next step is to start rolling out the Pilot. After the first elements of a suitable and feasible data structure have been worked out, we will continue - as proposed by

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26   See chapter 4.4, no. 229, page 88/116 in EIOPA's TA as mentioned above

EI-OPA - to specify this European data model and develop it together with the national PTSs involved. Here we will follow the original proposal to implement the concept of a consolidated pension overview in the rollout phase in a step-by-step approach from a functional as well as a technical point of view. This progressive approach will be necessary since it first requires the connection of further PTSs besides Belgium to fill this overview with data. The connection concept as described in the proposal – allowing data transmission in the format of the source (= Level 2), while creating a European data model which should be the basis for a consolidated overview (= Level 3) in the future has been confirmed through the work with national PTSs. However, the option to create a personal provider list manually and make use of the FYP dash- board is part of the actual ETS functionalities and will play a long term role as well until it is possible to obtain data from all countries. The general information on the individual countries and how to deal with mobile careers in matters of old-age provi- sion must also be completed in a step-by-step approach.

A joint task to fulfil the rights to execute professional mobility.
The task to fulfil the ETS vision and mission can only be reached in partnership. It will require the participation of stakeholders in the national pension sectors to contribute and support the ETS Association. From the very beginning, the ETS was a stakeholder driven initiative. Also, to cover the diverse pension landscapes in Europe with the different forms of pension provision a broad participation of the players involved is requested. During the past four years, the project managed to create and broaden the ETS community. With the foundation of the new ETS Association, the necessary fundament is built and demonstrates stakeholders' commitment and seri- ous intention to pursue the ETS mission. This ETS association promotes and will manage **a European Forum on Pension Communication**. This network of actors can learn from each other and help towards shaping the further development of user- friendly pension information. A first example was the ETS event in Berlin on the 29th of September 2022. The interest and participation of various stakeholders from dif- ferent pension sectors etc. has shown the potential off such a format not only for the ETS.

The ETS Association seeks the membership of stakeholders from all kinds of pen- sion provision in Europe. PTSs play a prominent and important role in this regard, as they are the main sources of personal pension information. However, as EIOPA`s Technical Advice has shown, ownership, governance and participation differ from country to country. Following this diversity, the ETS governance model encourages participation of all groups of stakeholders.

In addition, as EIOPA rightly pointed out, due to its portfolio, a tracking service must always act in the public interest. There is no doubt that this also holds true for the European Tracking Service. This means that **a balanced cooperation of the differ- ent actors in the interest of the users is essential. Working in the framework of a public-private partnership is the appropriate basis** and foreseen as the ETS gov- ernance model to administer and manage the service as described in chapter 3 of this report.

Public funding will be essential.

According to the described attributes of PTSs as well as the ETS[27], public funding is needed to secure that the ETS can operate independently, neutrally and on a not-for-profit basis. Revenues/income can only come from grants and, to a lesser extent, from membership fees, as any form of advertising or influence for private interests would be counter to the intended characteristics of independence and neutrality. As a truly European service the public authority to be addressed with this request would be the European Commission.

5.2.   Strategic aspects for the rollout

The implementation and complete realization of the ETS is complex due to the number of different states and pension providers involved. Therefore, the ETS Association will need time and resources to optimize the ETS applications and the implementa- tion plan. , Our initial project approach , built on the findings of the TTYPE recommendations, has been fully confirmed through the work undertaken by the project: A progressive approach will be the suitable way to set up the European Tracking Service.

5.2.1   Scope of the ETS

The ETS Association pursues the following vision:

"All residents in the European countries should have access to information on their pension entitlements no matter where they were acquired within Europe and regard- less of their country of residence." In order to achieve our vision, the project consor- tium has delivered the first tools and a framework to now start with the rollout of the ETS deliverables. The complex task to realize the European Tracking Service on Pensions comprises different aspects, target groups and fields of activities.

Following the defined vision and mission and based on the experiences of the project work, strategic goals have been defined:

1 ETS with its FindyourPension portal supports mobile workers to manage their pensions as well as pension provision.
2 ETS/FYP searches individual pension entitlements in Europe and presents users their pension overview.
3 ETS provides best practice exchange and mutual learning in its European Forum on Pension Communication.
4 ETS supports the establishment of new national pension tracking services.
5 ETS enables national PTSs to optimize information offered to their clients with periods abroad.

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27   EIOPA TA, chapter 4.4, No. 228, 229, page 88/116

Furthermore, the project consortium has agreed upon values for the ETS that can be summarized to the motto of "Find, inform and activate", describing the main targets of the ETS/FYP portal. The three different elements of the service are already realized in the pilot applications. By making more personal data accessible and realizing the integration of personal and general but tailored information these values will have to be considered permanently.

5.2.2 Continuation of the step-by-step approach

The setup of a fully functional ETS has to follow different phases with different focus and activities. In the project proposal (page 19 and 66) we assumed 3 phases to set up the ETS in full. After the pilot project, the ETS should enter a rollout phase, last- ing 5 years in order to connect more PTSs to the ETS, finalize the framework for a European pension overview and offer sufficient and tailored information. It can be assumed that once the regions where company pension provision is important as well as some large PTSs have joint the cooperation, it will convince the missing ones to enter the community at least in the running phase.
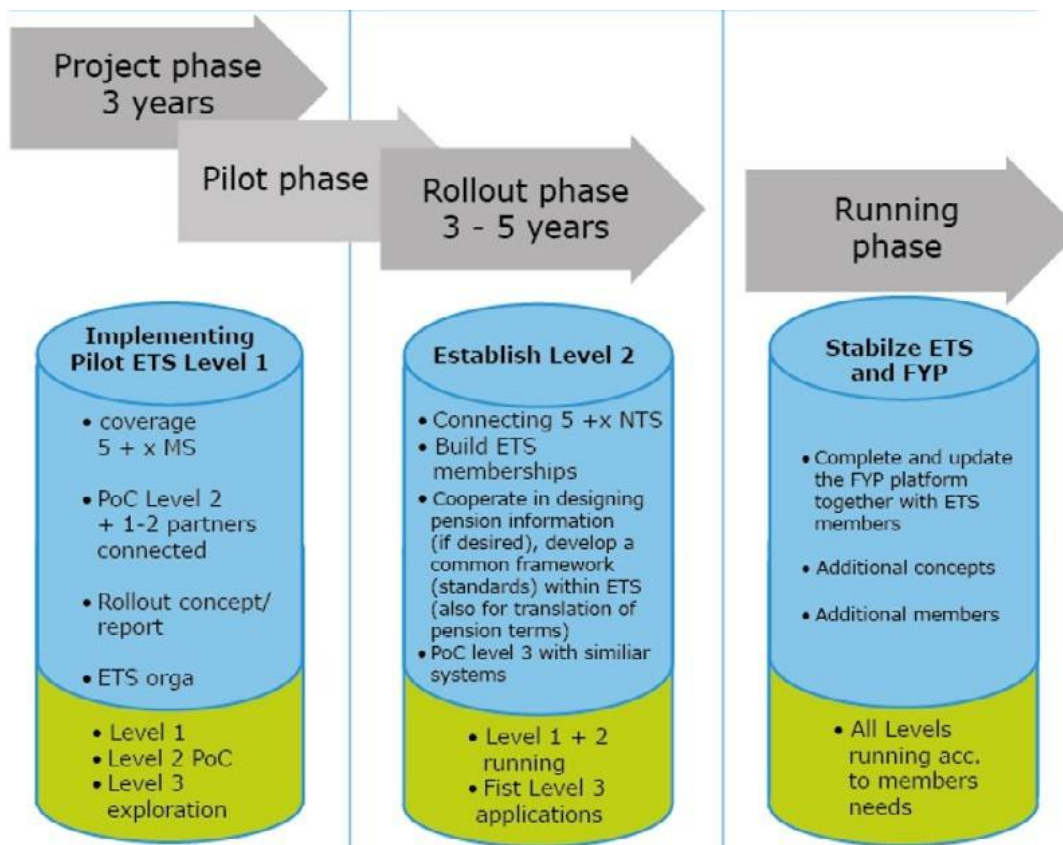

Figure 38: Phases of the ETS

Each of these phases will naturally have their own unique implementation costs. During the rollout phase it is extremely important to address a sufficient level of interested parties. The members will have to pay membership fees or other forms of contribution and by reaching a critical mass and gaining the necessary public funding the ETS will achieve the necessary financial sustainability to secure the longterm operation.

Following the connection concept of the pilot ETS (see chapter 2), the connection of PTSs is dependent on the eIDAS coverage and acceptance. In the course of the project work we identified different areas in which the rollout of the ETS could be facilitated. In terms of making the compilation of personal pension entitlements via the ETS possible towards many countries, further investment and promotion of onboarding to the eIDAS framework would be helpful. In addition to the participation as such and more authentication means with a high level of assurance, an extension of the minimum dataset of eIDAS to guarantee a successful identification of users in the national datahubs would be recommended (please refer to chapter 2 on authentication and identification).

Nevertheless, we see the potential of the ETS to manage rollout and connections. Since a concrete determination of the connections cannot be published at this moment in time, the consortium has undertaken a tentative geographical rollout planning[28]. In the course of the project and in particular in the last 6 months, representatives from the Netherlands, France, Denmark and Germany have indicated their positive attitude towards connecting to the ETS. Other PTSs do not meet the mentioned require- ments for eIDAS so far but are not opposing a connection. Thus, we are optimistic towards the connection of further countries in the next 5 year covering a significant number of mobile workers in Europe.

In the initial phase of the ETS, users will have to register and enter the necessary identifiers of the countries they worked in themselves. Storage of the different IDs in the FYP personal account is possible but of course an a**dditional building block in the eIDAS framework** would be much more attractive for the users.

5.2.3   Optimize legal and financial frameworks

Another field of possible need for policy or legislative measures is the issue of data exchange between the ETS and PTSs. As mentioned in the section on aspects of data protection, as well as by EIOPA in their technical advice, in certain countries PTSs have or need a specific legal basis to define the ability of giving access to personal pen- sion data. The project has not yet finalized the documentation of the requested legal consultancy by an external GDPR and data security expert. It is already apparent that

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28   The planning includes the following: 1. Necessary technical preconditions for connection will be provided by the PTS in question during the rollout phase. 2. A data structure to design the ETS pension overview will be agreed upon in the ETS/NTS committee. 3. Possible measures to develop or secure a legal basis for data exchange with the ETS will be explored and considered. 4. The costs for building and maintaining APIs on the side of the national tracking facilities will not be covered by the ETS budget. (Support and coordination to apply for public funding as mentioned in the EIOPA report could be offered by the ETS if requested.)

some countries do need an additional legal basis to connect to the ETS. In the light of the ETS's purpose, national legal bases should be achievable but may take time. As EIOPA mentioned in its recommendation concerning the connectivity (of PTSs) with the ETS[29], a European legal framework linked to the principle of free movement of workers could be established in the context of information obligations of the different pillars. Other initiatives could be possible as well and should be applicable to all pillars.

Finally, as already stated, the consortium members fully agree with EIOPA's findings on the public good definition of tracking services on pensions and a public or at least a joined funding necessity. Therefore, to enter the next phase of the ETS, a continued public sponsorship of the EC in the future is necessary.

5.3. How could the next phase look like – tentative activity planning

Referring to the considerations above, we assume a time frame of 5 years as a planning period for the next phase (rollout). Since it will take time to connect a relevant number of PTSs to the ETS, this perspective seems to be necessary and appropriate. The rollout phase is considered to consist of three time periods. The years 2023 and 2024, followed by the next years planning period: 2025-2027.

Below, a rough avtivity planning is presented. Aligned to the strategic goals described under 5.2.1, the following milestones to exercise the funtional and geographical rollout of the ETS are planned:

Goal 1	ETS with its FYP portal supports mobile workers to manage their pensions and pension provision.
2023	• More pension landscapes and information are included • Information is available in more languages • Dashboard includes more tools
2024	• Users learn basics of pension planning and e.g. categories of pension products etc. in line with the financial competence framework for adults recently published by the EU/OECD • Possible users are addressed via multi-channel/ social media campaigns • User experience and effect of information is constantly evaluated and improved
2025-2027	• Users can access FYP from other websites and services

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29   EIOPA TA, Connectivity with the European Tracking Service (ETS), chapter 3.3, recommendations no. 195, page 76/116

Goal 2	ETS/FYP searches individual pension entitlements in Europe and presents users their pension overview.
2023	• ETS infrastructure is technically prepared for further connections • First edition of data model to build a pension overview including personal information from different countries is concluded
2024	• FYP pension overview includes personal data with tailored information • (Contextualization) • 2nd and more countries are connected
2025-2027	• More countries are connected

Goal 3	ETS offers best practice exchange and mutual learning in its European Forum on Pension Communication.
2023	• Current and new editors are trained how to fill the pension landscapes • Pension communication: best practice and standards are exchanged in several workgroups • ETS network is built, membership acquisition continues • ETS/ PTS committee meets frequently
2024	• Stakeholder events are managed (seminars, General Assembly, conferences) • European data standard and other questions of data transmission are being discussed in PTS committee • Pension Events for cross border workers (online) are offered
2025-2027	• ETS association includes the first 15 members

Goal 4	ETS supports the establishment of new national pension tracking services (PTSs).
2023	• The added value of setting up of NTSs is communicated and promoted. • Events for exchange on ETS/PTS experiences and best practices are organized • A digital platform for information exchange is offered.
2024	• Contacts with gov. authorities and/or other representatives of countries with emerging/planned PTSs • Interested parties are interconnected in the expert network

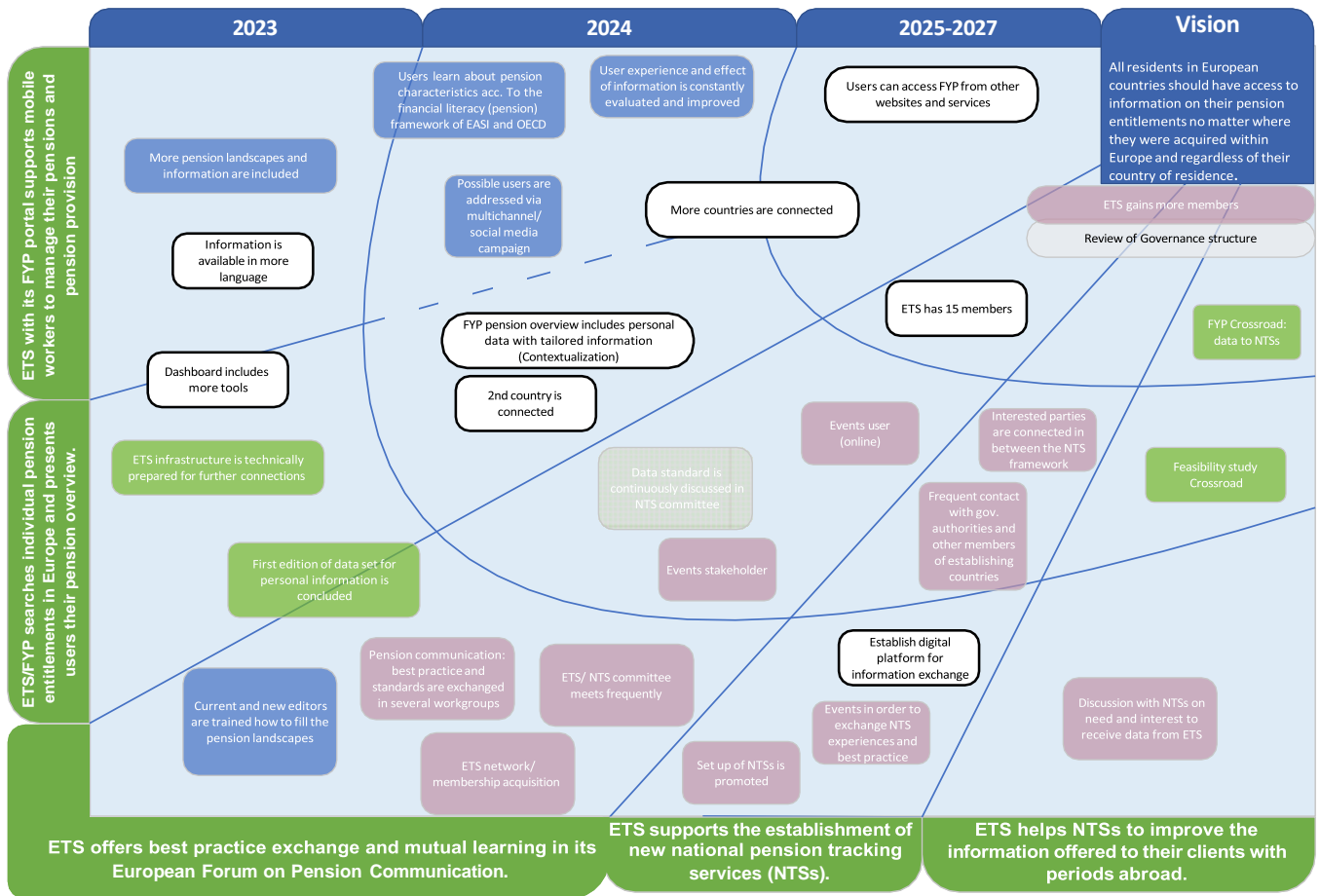| Goal 5	ETS enables NTS/PTSs to optimize information offered to their clients with periods abroad.
2023	• Discussion with PTSs on need and interest to receive data from ETS
2024	• Feasibility study on data exchange in the ETS Crossroad application (Privacy, legal basis, technical matters, app development)
2025-2027	• FYP Crossroad: data to PTSs

2023	2024	2025-2027	Vision

ETS with its FYP portal supports mobile workers to manage their pensions and pension provision

All residents in European countries should have access to information on their pension entitlements no matter where they were acquired within Europe and regardless of their country of residence.

More pension landscapes and information are included

Users learn about pension characteristics acc. To the financial literacy (pension) framework of EASI and OECD

User experience and effect of information is constantly evaluated and improved

Users can access FYP from other websites and services

Information is available in more language

Possible users are addressed via multichannel/ social media campaign

More countries are connected

ETS gains more members

Review of Governance structure

FYP pension overview includes personal data with tailored information (Contextualization)

ETS has 15 members

FYP Crossroad: data to NTSs

Dashboard includes more tools

2nd country is connected

ETS/FYP searches individual pension entitlements in Europe and presents users their pension overview.

ETS infrastructure is technically prepared for further connections

Events user (online)

Interested parties are connected in between the NTS framework

Feasibility study Crossroad

Data standard is continuously discussed in NTS committee

First edition of data set for personal information is concluded

Frequent contact with gov. authorities and other members of establishing countries

Events stakeholder

Pension communication: best practice and standards are exchanged in several workgroups

ETS/ NTS committee meets frequently

Establish digital platform for information exchange

Discussion with NTSs on need and interest to receive data from ETS

Current and new editors are trained how to fill the pension landscapes

Events in order to exchange NTS experiences and best practice

ETS network/ membership acquisition

Set up of NTSs is promoted

ETS offers best practice exchange and mutual learning in its European Forum on Pension Communication.

ETS supports the establishment of new national pension tracking services (NTSs).

ETS helps NTSs to improve the information offered to their clients with periods abroad.

Figure 39: Planning chart – the main goals/milestones to the overall goals.

List of Abbreviations

AEIP	European Association of Paritarian Institutions
CMU	Capital Markets Union
CoT	Circle of Trust
EaSI	Employment and Social Innovation
EC	European Commission
EIOPA	European Insurance and Occupational Pensions Authority
ESIP	European Social Insurance Platform
ETS	European Tracking Service on Pensions
FYP	FindyourPension
GDPR	General Data Protection Regulation
HLF	High-Level Forum
LoA	Level of assurance LoRLevel of reliability
MS	Member states
NTS	National tracking services
OAuth	Open Authorisation Standard
POC	Proof of Concept
PTS	Pension tracking systems
TAIEX	Technical Assistance and Information Exchange
TTYPE	Track and Trace Your Pension in Europe
VBL	Versorgungsanstalt des Bundes und der Länder

Attachment

ETS Content Guideline: Editors' manual

Contents

1 Goals of the ETS

> **The mission of the European Tracking Service on Pensions (ETS) is to support mobile workers in getting an overview of the pension entitlements they have acquired across Europe and to give them tailored as well as holistic information on their pensions no matter where they were accrued.**

The current ETS pilot is the first stepping stone on the path towards a fully functioning ETS. It was built in a project funded by the European Commission using the already existing brand "FindyourPension", a website which has been supporting mobile researchers in dealing with their various different pensions claims since 2011. It helps mobile workers find their European pensions; it informs them about European pensions; and activates them to access their pension entitlements. Through the ETS's online www.findyourpension.eu Portal, mobile workers find information about the pension landscape in different European countries as well as tailored information on different life situations. Furthermore, they will be able to find their pension entitlements. For pension providers located in countries that are not yet connected to the ETS, people are activated to find their possible providers and contact them.

Specifically, the pilot offers on its frontend[1]:

- Information on **key themes: targeted information via guided tours and content pages and recommendations** on what to do regarding pensions
- **Find your Provider with the pension compass and provider list**: List of possible pension providers and their contacts structured to countries and other criteria. Users can search their providers by narrowing down the possible number through certain search criteria
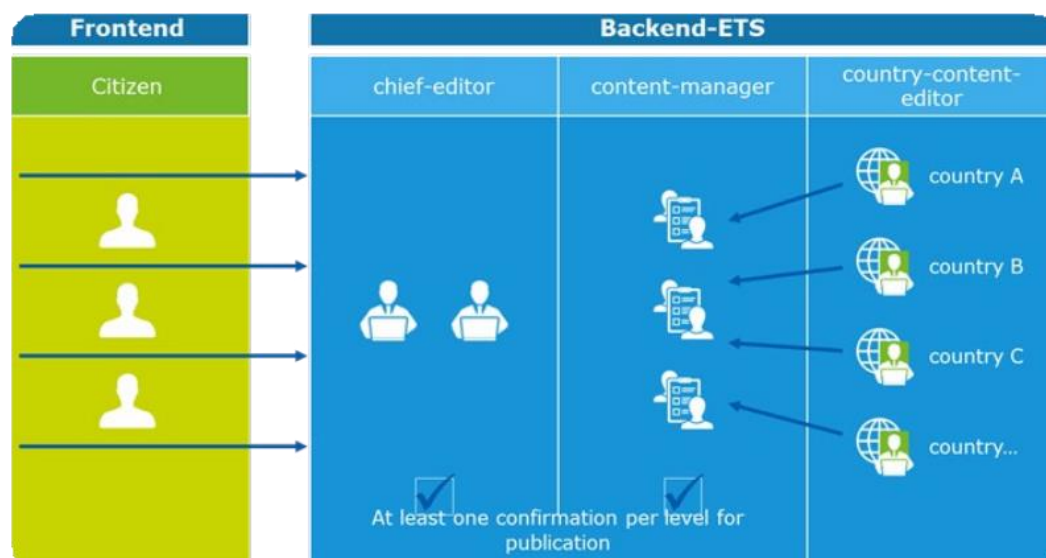
. . . .

1   Frontend is the so-called presentation layer – the part of the FYP website which is visible to the viewer (graphical user interface). https://it-service.network/it-lexikon/frontend

- **Pension tracker:** Creating a pension overview by using the pension tracker service. Via this service the user will be connected with pension tracking facilities of countries they may have worked in.

- **Pension Dashboard:** Personal overview via a pension dashboard function after logging-in. This section will include the personal pension entitlements found by the pension tracker via the connected data sources and via a self-track and a storing function as well. It also provides the possibility to save recommendation in an action list to activate the user

The technical development of the FindyourPension website is conducted by the TYPO 3 CMS. The CMS programme allows to create, edit and organize various con- tent without prior formatting. In addition, the CMS can be used by editors with hardly any knowledge of common programming languages and therefore supports the ETS publication process.

The goals of the ETS project is to have pension information on a range of countries acces¬sible on the FYP Website. To accomplish this ambitious goal, the CMS sup- ports to build a network of different editors in the frame of a clearly described edi- torial process. The latter is technically established using different roles and rights established in the CMS.

In a first step, country editors will be asked to provide pension information on the respec¬tive country. To simplify the process for the editors the ETS project team will provide templates which show the way the information is supposed to be drafted when it comes to structures and language use. The editors can either fill in the tem- plates and send them to the ETS editorial team or put the information directly into the backend of the CMS. Before the information is published on the frontend it will be forwarded to the content manager. If requested by the country editor, the infor- mation can be checked again. The final check-up and publishing will be done by the chief editors.

2 The target group: mobile workers

It is very important to write pension information from the perspective of the target group, in this case mobile workers. So, who are mobile workers and what characterizes them?

A first source of information to define the target group and understand the perspective and characteristics is the annual EU-intra labour report[2] which provides updated information on labour-mobility trends in the EU and EFTA countries. The analysis covers the mobility of all working age citizens (20-64 years) as well as the mobility of those who are active (employed and unemployed). The report also looks at indicators of economic integration of mobile citizens, such as employment /unemployment rates and occupations. The EU-intra labour mobility report 2018 states that EU-28 movers were frequently employed in construction, accommodation and food service activities (10% each).[3] Due to already existing evaluation of construction sector workers by the cooperating Soka-Bau, a former partner in the TTYPE project, the first persona was drafted out of this sector.

Another important group mentioned are workers in the health sector since healthcare, long-term care professionals and live-in care workers often pursue their careers in countries other than their countries of origin. Due to the aging population and the

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2   The actual EU Intra-labour mobility report used was the one from 2018, retrieved on 15/01/2021
https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8242&furtherPubs=yes

3   EU Intra-labour mobility report 2018, retrieved on 27/10/2021

already existing shortage of medical staff in many European countries the increasing demand is likely to lead to increase the professional mobility across the EU/EEA.[4]

According to recent developments an increasing tendency towards highly skilled working groups of movers (i.e., those requiring a tertiary degree or further qualifications) can be observed, and slightly fewer in elementary or manual work, which is one reason why we picked a representative of that specific group as one of the FYP personas. One important subgroup of the highly skilled working groups originates in science and engineering.[5] Due to the previous project, in which the ETS Project team members could already gain experience in the work with mobile researchers, it was decided to create a persona from this sector in addition.

To conclude, sectors to represent large groups of mobile workers as well as different understandings and perspectives were chosen to create our personas:

- Construction/manufacturing
- Health
- Research

4   EU Intra-labour mobility report 2018, retrieved on 27/10/2021
5   EU Intra-labour mobility report 2018, retrieved on 27/10/2021

3 Personas and concept framework

a.

The Personas - Andrej, Milena and Alina

To bring the target group to live, the ETS project group developed 3 personas. Personas are hypothetical archetypes of potential mobile workers that aim at representing them throughout the development of the ETS. The personas were validated through X qualitative interviews

Andrej is Polish, 52 years old, married to his wife Zuzanna and has one child. Zuzanna is working fulltime as well while her mother is taking care of the kids. To support his family Andre has worked in many different countries. He sometimes lives in temporary accommodations, changes his employers often and has worked for subcontractors as well. For a few times he even had to move completely and live abroad for a few months. As he is getting closer to his retirement he is starting to wonder where his pension will come from and where he has to apply for his pension.

Milena is Romanian, 40 years old, married and has 2 kids. Due to an industrial accident her husband, Adrian, is not able to work and taking care of the kids. She is the breadwinner of the family. She has already worked in Italy as well as Switzerland and France as trained nurse. She hopes she will be able to save some money for emergencies. Or for retirement later. Milena is worried about her future pension because she has lived in different countries. Additionally she is anxious about what will happen when she gets sick as well because working as a nurse is tough and she feels exhausted sometimes. She even thinks about retiring early.

Alice is French, 33-year-old and single. At this time of her life it is important for her to focus on her job. During her young career she has already worked in Spain and Italy on short time contracts as researcher. She wonders what will happen with her pension contributions she has already paid. She would prefer to have the statu- tory pension contributions transferred or to get a refund.

> *For many people, being asked to solve their own retirement savings problems is like being asked to build their own cars."*
>
> **Richard Thaler**

Mobile workers have special information needs due to the fact that they built up pen- sion entitlements in different countries, under different pension schemes and condi- tions. However, there are a few generic insights from academic research that are also relevant in this setting. Specifically, academic research has identified cognitive and behavioral biases (information overload, status quo, present bias, limited rationality, inertia, etc.)[6] , which affects the way they read, understand, interpret and engage with retirement information. Knowing about these factors is important for filling the FindyourPension portal with information that resonates with the target group.

People…

* Typically think very abstractly about the distant future and therefore do not consider specific actions that are, for example, needed to achieve a desired pension income.[7]

* Have inconsistent preferences when thinking about the here and now versus the future.[8]

* Believe that they have more time and resources in the future and therefore often postpone retirement planning.[9]

6   EIOPA "Report on Good Practices on Communication Tools and Channels for Communicating to Occupational Pension Scheme Members", 31 August 2016

7   e.g., Trope, Y. and N. Liberman (2003), "Temporal Construal," Psychological Review, 110 (3), 403-21.

8   e.g., Frederick, S., et al. (2009), "Time Discounting and Time Preference: A Critical Review," in The New Behavioral Economics. Volume 2. A Taste for the Present, E.L. Khalil, ed.: Elgar Reference Collection. International Library of Critical Writings in Economics, vol. 238. Cheltenham, U.K. and Northampton, Mass.: Elgar.

9   e.g., Zauberman, G. and J.G. Lynch, Jr. (2005), "Resource Slack and Propensity to Discount Delayed Investments of Time Versus Money," Journal of Experimental Psychology: General, 134 (1), 23-37.

- Have habits that are hard to break.[10]

- Find it difficult to imagine their future and how their future self and future live will look like[11]

- Lack self-control to take action[12]

- Sometimes experience "retirement anxiety", have a negative image of themselves at retirement[13], or have negative associations with the word "pension"[14]

- Find pension information complex to understand and process and many lack basic financial and pension knowledge[15]

b. Concept framework

The countries' pension landscapes are composed of different pillars and tiers and at the same time based on different pension concepts. Related to this, the elements, composition and the share in the single pension portfolios as well as the coverage of certain pillars in a certain country are entirely diverse. The perception of and attitude to pension provision, pension schemes and systems is therefore completely differ- ent and depends on the origin of a user/person as well as the work-and life biography.

Having these aspects in mind, we would like you to take note of the ETS concept framework when designing content for the FYP website:

An important precondition to write content for mobile workers is to be aware of the fact that "pension" has different meanings even in a national context. Pension can refer to a form of deserved rest, a form of insurance, etc. This is even more the case in a European context. That is why we encourage the editors of the website to take a walk in the mobile workers shoes and be aware that the mobile worker might have a

. . . .

10   e.g., Wood, W., et al. (2005), "Changing Circumstances, Disrupting Habits," Journal of Personality and Social Psychology, 88 (6), 918-33.

11   e.g., Hershfield, H. E., Goldstein, D. G., Sharpe, W. F., Fox, J., Yeykelis, L., Carstensen, L. L., & Bailenson, J. N. (2011). Increasing Saving Behavior Through Age-Progressed Renderings of the Future Self. Journal of Marketing Research, 48, S23-S37.

12   e.g., O'Donoghue, T. and M. Rabin (1999), "Doing It Now or Later," American Economic Review, 89 (1), 103-24.; Thaler, R.H. and H.M. Shefrin (1981), "An Economic Theory of Self-Control," Journal of Political Economy, 89 (2), 392.

13   e.g., Eberhardt, W., E.C. Brüggen, T. Post and C. Hoet (2015). Segmentation of Pension Plan Participants; Identifying Dimensions of Heterogeneity, Netspar Design paper 47.

14   Vonken, J., & Iking, E. (2016). Neuromarketing: hoe ons onderbewuste over pensioen denkt [Neuromarketing: How Our Subconscious Thinks About Retirement]. In A. E. Bronner, E. C. Brüggen, P. Dekker, E. D. De Leeuw, L. J. Paas, A. Smidts, & J. E. Wieringa (Eds.), Ontwikkelingen in het marktonderzoek 2016 (Vol. 41e Jaarboek, pp. 27-40). Haarlem: SpaarenHout.

15   e.g., Bernheim, B. D., Skinner, J., & Weinberg, S. (2001). What Accounts for the Variation in Retirement Wealth among U.S. Households? . American Economic Review, 91(4), 832-857; Damasio, A. R. (1994). Descartes' Error: Emotion, Reason, and the Human Brain. New York: Putnam.; Van Rooij, M., Lusardi, A., & Alessie, R. J. (2012). Financial Literacy, Retirement Planning, and Household Wealth. The Economic Journal, 122(560), 449-478.

different understanding of pension[16]. In addition, they may not understand the fact that there are different pension sources like state-, occupational- and personal pension systems. Therefore, information has to be adapted to their needs.

The concept framework serves as a kind of "construction manual" for future editors and guides them through the whole process.

Steps for the editor when writing the content:

- Make yourself aware of the different perceptions described above.
- Explain the basics of your country's pension concept in the section of the pension landscapes and repeat it in the guided tour where it helps the user to understand the context.
- When answering the questions in the life situation guided tours: Distinguish between the pillars and try to cover the holistic perspective as far as possible. However, do not overload the users with too detailed information.
- Always try to give a holistic overview and do not cover only your own scheme.
- End with a concrete recommendation for the users' action lists where possible.

The table on page 135 assists in implementing these steps and to start writing the content.
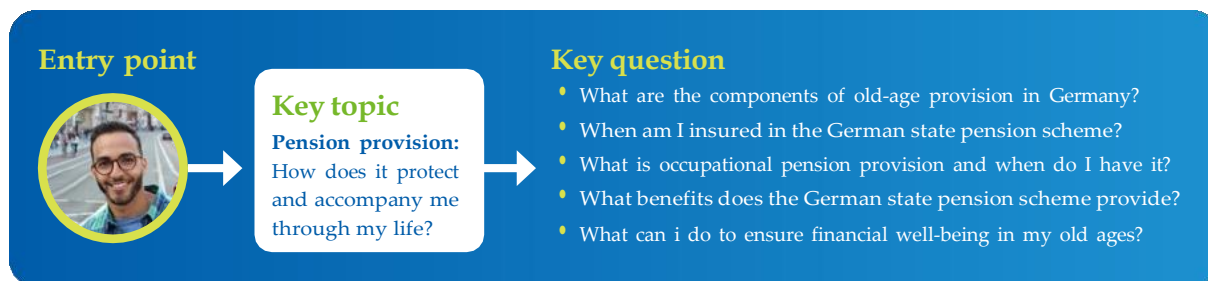
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16   The term "concept framework" was first used by Prof. Yves Stevens from the KU Leuven who did a lot of research regarding pension communication in the last decade. He gave some input to the project from his work and presented his findings during the ETS kick-off event as well as at the first webinar on pension communication held at the beginning of July 2020.

4 Routes that need to be filled

The ETS pilot contains 4 routes that you have to fill with information.

1 Guided tours:
   Tailored information, structured according to 3 different life situations
2 Good to know
3 Recommendation
4 Pension Landscapes

Entry point

Key topic
Pension provision:
How does it protect
and accompany me
through my life?

Key question
- What are the components of old-age provision in Germany?
- When am I insured in the German state pension scheme?
- What is occupational pension provision and when do I have it?
- What benefits does the German state pension scheme provide?
- What can i do to ensure financial well-being in my old ages?

In this chapter, we explain the purpose of each element, describe which information components it includes, and provide an example.

Guided tours

The purpose of a guided tour is to shape the pension information according to the user's needs. Therefore, the search should be designed as comfortable as possible to motivate the user to continue the search until all the questions are answered. The users are guided through the content with the help of a predefined questions – answer system based on their pension information needs. The result depends on the choices the user made during the guided tour. The information guided tours are

centred on key questions that mobile workers have which were identified based on user journeys from mobile workers as well as evidence-based insights from qualitative interviews.

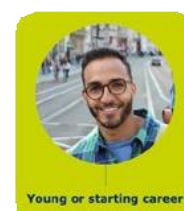There are two types of guided tours:

a. Structured and tailored information guided tour.

These guided tours are centred on the key questions that users have. The key questions were identified based on user journeys from mobile workers and evidence-based insights from qualitative interviews.

In general, the guided tour will be accessible from different entry points:

- Young and starting career
- Family and pension
- Generation 50plus

The guided tours start after the user has chosen the one of the entry points for life situations or the pension compass.

Key topics for the entry point: Young and starting career.

After users have selected the entry point "life situations", they can select from several key topics we have identified as most interesting topics for the respective age group. The information is shaped according to the selected entry point respectively target group.

- Pension provision: How does it protect and accompany me through my life?
- What happens with my pensions when I move across Europe?
- What happens when I am ill or can't work anymore?
- How do I increase my pension?
- Family & pension

Key question

After the user has selected the key topic, a key question can be selected.

The key questions differ from key topic to key topic depending on the key topic which was chosen. The information is always shaped in specific manner to ensure compre- hensibility: Examples include a short description of the pension system of a country, the main factors that contribute to the height of the pension income, or how the dif- ferent pillars relate to each other.

b. "Findyourprovider" guided tour – Pension Compass

The „Findyourprovider "guided tour, also called the Pension Compass implements a search function. Through the Pension Compass users are able to identify providers

that they were affiliated with. It guides users through each country's pension land-scape by using question and answer technology. Past and current pension affiliations are identified through questions on, for example, employment status, sectors, liberal professions, and regional or multinational companies. At the end, users receive an overview of a number of they have probably been with.

Good to know

The good to know sections contain general background information that users should be aware of. Examples include a short description of the pension system of a country, the main factors that contribute to the height of the pension income, or how the different pillars relate to each other. The format serves as a "Take note" element in the guided tour content. It is written in a holistic perspective and aims to underline basic and important principles of and knowledge about a respective pension land-scape/system which mobile workers who are not familiar with should know. Below is an example that explain the factors that determine the level of the German state pension.

Recommendation

According to our Motto "Find, inform and activate" the ETS has developed the Recommendation feature. The Recommendation aims to "activate" the user in the form of a "to do".

After the users have finished the guided tour they will be offered recommendations. Short information is accompanied by proposals for recommended actions that can be added to a to-do list and saved in the user's personal Dashboard on the website. The so-called 'Recommendations' can serve as reminders, be ticked off and deleted after the tasks have been completed.

Pension Landscapes

The pension landscapes section provides users with an overview as well as background information on the pension system country per country. It is important that this information does not contain technical, pension language or difficult words. If necessary, explanations should be added. The information should not be to compact, and transition words should help users to understand the relationships between dif- ferent statements.

This section shows an example of how the Dutch pension landscape can be described using existing pension/technical terminology, followed by an example of how the information can be communicated to users in a more accessible and understandable way.

Examples
Overview – 1st layer

Option 1

The Netherlands is a <mark>true</mark> example of a <mark>genuine</mark> three pillar <mark>system or concept</mark> in terms of pension provision.

The system consists of a <mark>residence-based, basic</mark> state pension related to minimum wages. Secondly, <mark>occupational</mark> pension schemes which are <mark>quasi-mandatory</mark>. This is because there is a broad coverage of employees based on <mark>collective bargaining agreements</mark> and individual saving schemes. The statutory pension is a <mark>flat-rate</mark> pension and its contributions are solely paid by the employee. The state pension together with the occupational pension <mark>comprise</mark> the main income of the elderly.

Technical, pension language, difficult words

Are there untrue examples? Difficult word
What is the difference? Is this relevant here?

What does this mean? Very compact information with difficult terms
Difficult word
Unclear, what does it mean?
Clear enough?

Difficult word; concept clear enough?

Difficult word

Option 2

The Netherlands is an example of a three-pillar system for pension provision.

The 1st pillar state pension provides a basic income to everyone who lives or works in the Netherlands. It is a flat-rate that is related to the minimum wage. The 2nd pillar pension is build-up through the employer. Around 90% of employers in the Netherlands offer a pension scheme. Individual insurance forms the 3rd pillar. It is, for example, used to fill a pension gap or to retire early, or by self-employed. In the Netherlands, the 1st pillar state pension together with the 2nd pillar work-related pension form the main sources of retirement income.

No technical terms, more understandable, short sentences

2nd layer – more detailed information

1st pillar: state pension

Provider / Institution:	Sociale Verzekeringsbank (SVB)
Scheme: **AOW**	Basic state pension (AOW) Everyone who lives or works in the Netherlands automatically builds up AOW.
Financing:	Financed through taxes paid by current workers ("pay-as-you-go" scheme)
Old-age benefits	The state pension is a flat-rate. The amount depends on marital status and the number of years that someone lives or works in the Netherlands. The full amount is achieved after 50 years, starting at the of 15 and up to retirement age. For 1 year that someone did not live or work in the Netherlands, AOW is 2% lower. In that case, a conditional buy-in is possible. The full old-age pension equals 70 % of the net minimum wage (net minimum wage is defined by the state twice a year) for singles and 50 % for each partner as part of a couple. In January 2021, the full net monthly pension benefit was EUR 1.226,60 per month for a single person and EUR 838,55 for each partner as part of a couple. Retirement age changes along with life expectancy but is at least 67 years. The exact retirement age is known 5 years in advance. The provider, SVB, has an online calculator in which the expected retirement age can be checked.

2nd pillar – work-related pension

Provider / Institution:	There are 3 types of pension providers: 1. Industry-wide pension funds (for a whole sector, such as the civil service, construction industry, hotel and catering industry or the retail sector), 2. Corporate pension funds (for a single company or a corporation), 3. Pension funds for independent professionals such as medical specialists and dentists Pension funds are non-profit organizations. They are legally and financially independent from companies. Pension funds are therefore not directly affected if a company gets into financial difficulties. The website https://www.mijnpensioenoverzicht.nl/ provides an overview of all pension providers where someone has build-up pension.
Scheme:	The details of the schemes differ per pension fund. Moreover, the system is currently under-going a significant reform. Details of a scheme can be checked with the pension provider.
Coverage rate:	Around 90 % of employers offers a work-related pension scheme. Employers who fall under a collective labor agreement in which a pension scheme is stated, are obliged to offer this pension scheme to their employees.
Obligatory/ voluntary:	In the Netherlands there is no obligation by law. However, since pension provisions are part of most collective labor agreements, pension schemes are quasi mandatory.
Financing	Both the employer and employee set aside money for retirement. This is called a capital funded pension. Employers usually pay about 2/3 of the total pension contributions and employees 1/3. The exact amounts depend on the specific labor agreement.

Pension benefits	The amount that someone receives depends on how much contribution has been paid, work factors (for example, working part-time, level of salary), and the choices made at the time of retirement. The amount also depends on investment results and the reserve that a pension fund must keep for retirees.

The website https://www.mijnpensioenoverzicht.nl/ provides insight into the pension that someone has built up as well as an estimation of the expected monthly retirement income. The retirement age is specified in the pension scheme. It may differ from the state pension age. Many pension schemes offer the option of retiring earlier or later than the specified retirement age.

The next points could be left out, but are important characteristics of the pension schemes; details can differ widely, and can make a huge difference

Additional features
Many pension schemes include a survivor's scheme. In the event of death, the surviving partner and (minor) children receive a monthly amount. Pension schemes differ in whether this is arranged on an accrual or risk basis. Risk basis means that the insurance ends when someone stops paying into the pension fund, for example because of a job change. Accrual basis means that the surviving partner will still receive a survivor pension based on the amount that has been paid into this insurance, even if the partner did no longer actively pay into the pension fund.

There are differences in pension schemes with respect to whether the pension is continued to be build up if someone becomes unable to work. |
| **Tax incentives:** | Taxation on pension benefits only when pension is received (reversal rule) |

3rd pillar - Private pension savings

Products	The third pillar is formed by individual pension products. These are mainly used by the self-employed and employees in sectors without a collective pension scheme. Anyone can purchase a product in the third pillar to meet his/her requirements. In this way, people can save extra pension.
Tax incentives:	Tax relief up to a certain limit.

5 FYP – Principles for clear communication

HOW should the key information be written up?

There is a tension between providing complete and accurate versus user-centric and understandable information. In the ETS, our philosophy is, based on expert and research insights, that "less is more".

Thus, information should focus on the most important elements that are relevant for mobile workers. This information should be written up in a simple and understandable manner, following the checklist from chapter 3.

Even when a second layer allows to provide more detailed information, the information should still be understandable and adhere to the specified communication guidelines.

The information should also empower users and encourage them to get active. Thus, users should understand how they can proceed, which additional information they can acquire, or what they can do with the information.

Important starting point: take on a user centric view!

Chapter 2 described the characteristics of the target audience. Please keep the personas in mind when writing the information. Moreover, it is important that all information is written up in a **consistent**, **comparable**, and **understandable** manner. To achieve this, we developed a checklist.

Important to consider: Layering

Please make sure you always layer the information for the user .

First layer: Basic information using simple language. Concentrate on the core message!

Second layer: More detailed information. What information is important beside the core message.

The purpose of the checklist is twofold:

1 To guide the writing process from the beginning.
2 To check afterwards whether the written text adheres to these principles.

Checklist

Before you start….

Take a moment and become aware of your target group – **The Mobile Worker**.
Use the templates send to you beforehand [17].

ETS Communication Principles

The Layering approach is taken into account at all times.
Do not use detailed information which has to be frequently updated
Place a short recommendation – "to do" at the end of each section.
Do not put a list of links at the end of each section.
Instead choose links are carefully.

Syntax

Short sentences
Use transition words like 'and', 'but', 'so', and 'because'
Address the reader personally, use YOU
Write in active voice

Semantics

Adapt to knowledge level of readers
No difficult words
Technical terms are avoided or explained
No abbreviations [if absolutely necessary, define/explain them]

Structure

One line of thought per paragraph

Style

Avoid a patronizing and distant tone
Formulate information in a constructive way, avoid negative associations, or framing pension as dull, complex and boring

· · · · · · · · · · · · · · · · · · · ·

17   If you feel like the template does not mirror your pension system appropriately please contact us.

6 Your turn

> **Now it is your turn as an editor to write up the information about your country in an accessible manner.**

Step 1: Getting started

Before you are starting, we first would like to ask you to become aware of the perspective from which you are looking at pensions. This is important because the simple term 'pension' can have many different implicit meanings to us, depending on the country and institutional context that we are coming from. Our perception of the term will influence how we communicate about pensions. It also contains important information for users, since it gets to the core of what makes the pension system of each country special.

What makes mobile workers different from the "normal" user, is, that they do not have the perceptions described above. They will therefore, very often not interpret and understand the information in the way the writer has anticipated it. Hence, this first step is meant to uncover (implicit) pension associations.

Please rate each pillar on whether it implicitly or explicitly includes the following concepts:

Pension concept frameworks	1ˢᵗ pillar	2ⁿᵈ pillar	3ʳᵈ pillar
	Not at all — completely	Not at all — completely	Not at all — completely
A form of deserved rest	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A compensation for the physical impossibility to work any longer	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A part of the wage structure	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A deferred renumeration	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A reward for services paid to the country	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A form of saving	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A form of property	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A form of individual or collective life insurance	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A form of social insurance	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
A form of shared citizenship	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○
Other: _____	○ ○ ○ ○ ○	○ ○ ○ ○ ○	○ ○ ○ ○ ○

Step 2: Write the texts

1 Go to…. where you find the templates [see also Appendix A].

2 Please fill out the templates for your country, keeping the target audience and communication principles in mind.

3 Once you have written up the text, please use the communication checklist to verify that you adhere to the principles.

7 Guided tour structure

> **As you all know, the Find your Pension website is a central part of the ETS project.**

The technical go life of our pilot website already took place in June last year. The VBL team has already worked on the content for the German landscape the FYP website. For the European part of the Website however, we need you! That's why we kindly ask you to fill in the template below.

Our FYP Website is targeted to mobile workers. Therefore, we need the information structured for this specific target group. In addition, one of our goals is that the pension information is understandable for everyone. That is why we use a certain structure for our content.

Structure:

6 First layer: summing up the most important facts in an understandable manner.
7 Second layer: More detailed information on the topic.
8 Recommendation: aims to activate the user, here you can formulate a short to do.
9 Good to know: Is there a speciality in your pension landscape you would like to share?

User Journey:

The information can be accessed on the landing page. Afterwards the user can start the guided tours which offer him the target information needed.

To enable a good user journey, we split the information in the guided tour firstly into life situations and secondly into key topics and key questions. One key topic has sev- eral key questions.

User flow:

Landing page – Guided tours target to life situations – key topic – key questions

Overview on key topics and key questions:

Target group 1: Young and starting

I. Pension provision: How does it protect and accompany me through my life.

1 What are the components of old-age pension provision in [country]?/ What are the components of the pension system in [country]?
2 When am I insured in the…. state pension scheme?/ When do I join the [country] national public pension?
3 What is occupational pension provision and when do I have it?
4 What benefits does the [country] state pension scheme provide?
5 What can I do to ensure financial well-being in my old ages? (Voluntary)

II. What happens with my pensions when I move within Europe?

1 Will I lose my state pension when I leave the country?
2 Can I get a refund of my pension contributions?
3 Can I get a refund of occupational pension contributions?
4 Can I transfer occupational pension contributions?
5 What should I do with my pension when I move to another EU country?

III. What happens when I am ill, can't work anymore or my work conditions change?

1 What happens when I am ill or can't work anymore?
(just in general short answer and reference to 50+, what happens if)
2 What happens with my pension if I work part time?
3 What happens with my pension if I am a job applicant?
4 What happens with my pension if I study?

IV. How can I increase my pension?

1 How can I increase my pension?
2 How do my life- earnings impact my pension?
3 Do I have an occupational pension?
4 How does my chosen retirement age impact my pension?
5 Can I save privately for my pension?
6 What is salary sacrifice (Entgeltumwandlung) and how does it work.

Target group 2: Family and pension

I. Building a family! How does this impact my pension?

3   How does time with young kids impact my pension?
4   Is there a financial compensation for parental leave?
5   Does parental leave affect my pension if I live in [country]?

II. How can I protect the family?

1   How will my partner be protected if I get so sick I can't work anymore?
2   How will my children be protected if I get so sick I can't work anymore?
3   How will my partner be protected if I die?
4   How will my children be protected if I die?
5   What happens when I am ill, can't work anymore or my work conditions change?

III. Effects of separation and divorce on pensions?

1   I am married but planning to split up. How does a separation or divorce affect my retirement planning?

Target group 3: Generation 50+

I. Time to check out: What do I have in my pension pot.

4   Where am I currently insured? Different components in [country]?/Where have I accumulated my pension in [country]?
5   What am I paying in contributions at the moment? /Where have I accumulated my pension in [country]?
6   How to find out my pension accrued in other countries? / How can I find out how much pension I have accrued in other countries? Link young and starting
7   What can I expect as my pension pay-out/ how much will I receive when I retire?
8   What kind of benefits do my pension systems provide? / What benefits can I receive from the [country] pension system?

II. What happens if,....

1   What happens if I die?
2   What happens when I am ill, can't work anymore or my work conditions change.

III. Starting to plan: Will my pension pay-outs be enough? Can I do something extra at this point?

1   Where can I do a pension forecast?
2   Did I receive a pension information or benefit statement recently? If not, how can I get one?
3   What does it say regarding my expected pension pay-out and the retirement age?
4   Will my pension pay-out be enough for me to live on during retirement? (Voluntary)
5   Increasing pension age. How does my chosen retirement age impact my pension?
6   How much do I have to live on when everything is added together?
7   Can I save privately for my pension?

IV. Preparing for retirement?

1   When can I retire and when can I stop working?
2   There are different retirement ages in different countries. How does that impact me?
3   Where do I apply for my pension pay-out?
4   Can I apply for a state pension in…. if I'm still working in another country?
5   Does my work in another country affect my pension entitlements and the beginning of my retirement in …..?
6   How will the pension be paid out?