IMI2 821513 – NEURONET

Efficiently Networking European Neurodegeneration Research

WP3 – Tools & Services

D3.1 INKB web platform v1: NEURONET Knowledge Base v1

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Contents

Document history

Version	Date	Description
V0.1	15/06/2019	Initial draft for WP3 team discussion
V1.0	17/07/2019	Second draft following feedback from the SCB & Consortium provided during project meetings (2-3 July)
V1.1	25/07/2019	Revised draft with latest IT updates
V1.2	30/07/2019	Final draft for review of the Consortium
V1.3	29/08/2019	Final version following the input from partners

Definitions and abbreviations

Partners of the NEURONET Consortium are referred to herein according to the following codes:

1. **SYNAPSE**: Synapse Research Management Partners SL
2. **NICE**: National Institute for Health and Care Excellence
3. **AE**: Alzheimer Europe
4. **JANSSEN**: Janssen Pharmaceutica NV
5. **LILLY**: Eli Lilly and Company Limited
6. **ROCHE**: F. Hoffman – La Roche AG
7. **TAKEDA**: Takeda Development Centre Europe LTD
8. **SARD**: Sanofi-Aventis Recherche & Développement
9. **PUK**: Parkinson's Disease Society of the United Kingdom LBG

Grant Agreement: The agreement signed between the beneficiaries and the IMI JU for the undertaking of the NEURONET project.

Project: The sum of all activities carried out in the framework of the Grant Agreement.

Work plan: Schedule of tasks, deliverables, efforts, dates and responsibilities corresponding to the work to be carried out, as specified in Annex I to the Grant Agreement.

Consortium: The NEURONET Consortium, comprising the above-mentioned legal entities.

Consortium Agreement: Agreement concluded amongst NEURONET participants for the implementation of the Grant Agreement. Such an agreement shall not affect the parties' obligations to the Community and/or to one another arising from the Grant Agreement.

KB: Knowledge Base

HTA: Health technology assessment

IMI: Innovative Medicines Initiative

ND: Neurodegenerative Disorders

WP: Work Package

GDPR: General Data Protection Regulation

SGG: Strategic Governing Group

Publishable summary

Deliverable D3.1 describes the design and structure of the NEURONET Knowledge Base, a web platform that will act as a portal for the whole Innovative Medicines Initiative (IMI) Neurodegenerative Disorders (ND) programme. The aim of the Knowledge Base is to provide a summary overview of the IMI ND programme, in the format of a dashboard, where users can find information about the portfolio of projects (e.g. work plan, deliverables, results, publications, tools developed, etc). Furthermore, it will include a section with contact details of experts in key project areas (i.e. ethics, data sharing, regulatory interactions, sustainability, communication and management).

The Knowledge Base will make a conscious effort to be usable and useful for projects, with appropriate interfaces and search capabilities, to prioritize ease of navigation and accessibility for an easy and efficient user experience. Deliverable D3.6 *INKB web platform v2*, due in month 18, will provide an update on the structure and contents of the tool.

1.   Background

The primary aim of the IMI Coordination and Support Action NEURONET is to set up an efficient platform to boost synergy and collaboration across the IMI projects of the ND portfolio, assisting in identifying gaps, multiplying its impact, enhancing its visibility and facilitating dovetailing with related initiatives. NEURONET intends to be an eminently operational, pragmatic and agile instrument for efficient collaboration and communication among both present and future IMI ND projects.

WP3 *Tools & Services* aims to support projects by developing specific tools and services tailored to the context of IMI ND research. As part of this WP, the focus of task 3.1 *Setting up and maintaining an IMI Neurodegeneration Knowledge Base* (M1-M36) is to design, develop and maintain a user-friendly web platform that acts as an web portal for the IMI ND programme.

The aim of the Knowledge Base (KB) will be to provide a summary overview of the IMI ND programme, in the format of a dashboard, where users can find information about the IMI ND projects (e.g. work plan, deliverables, results, publications, tools developed and relevant documentation generated etc). Furthermore, it will include a section with contact details of experts in key project areas (i.e. ethics, data sharing, regulatory/HTA interactions, sustainability, communication and management).

The IMI ND projects that will be included in the KB are the following:

1.   ADAPTED
2.   AETIONOMY
3.   AMYPAD
4.   EMIF
5.   EPAD
6.   EQIPD
7.   IM2PACT
8.   IMPRiND
9.   MOPEAD
10. PD-MITOQUANT
11. PHAGO
12. PRISM
13. RADAR-AD
14. RADAR-CNS
15. ROADMAP

The KB will make a conscious effort to be usable and useful for projects, with appropriate interfaces and search capabilities enabling easy access to information and an efficient user experience. While this may sound trivial, it could be quite challenging depending on legal arrangements, policy of each project, ability to appropriately label (i.e. add keywords/metadata) to each resource, etc.

WP3 efforts will be geared towards making the NEURONET KB a streamlined, added-value tool that complements and boosts the individual projects' efforts in publicising and disseminating their efforts and results, illustrating how the different projects might be connected in an integrated research programme.

The website, which uses Laravel, a PHP framework, among other programming languages (e.g. JavaScript) is being developed by SYNAPSE IT development team. Deliverable D3.6 *INKB web platform v2*, due in month 18, will provide an update on the structure and contents of the tool.

2. Target users

There has been debate in WP3 about who should be the target users of the KB. Some members argued it should be an open tool accessible to anyone, including lay people, while others were of the opinon that access should be exclusive and therefore restricted to the project leaders and coordinators only.

After careful consideration, and due to the nature of some of the information that will be provided, WP3 decided that the tool should not be accessible to the wider public. Initially, the target users of the KB would be:

- IMI ND Project leadership teams
- IMI staff
- IMI Neurodegeneration SGG members

The list of users of the KB may be modified in the future according to the needs of NEURONET, and as mentioned previously, any changes will be reported in deliverable D3.6.

3. Permission levels

There will be three permission levels for users:

Admin: Can list, create, read, update, download and delete all contents in the system, including users and user passwords.

Editor: Can list, create, read, update, download and delete all contents.

The proposal would be that that each project designates 1-2 editors (e.g. from the Project Management Team or the Communications team) to feed their project information into the Knowledge Base. Detailed forms for data input will be used to ensure information is provided in a similar format for all projects.

Subscriber: Can list, read and download contents.

4. Welcome page

The landing or welcome page of the Knowledge Base (https://kb.imi-neuronet.org) will be the first page people encounter prior to their registration as new users. It will include:

- NEURONET logo
- Full project name
- Salutation text
- Invitation to Log in / Register
- Links to NEURONET website and Twitter profile

5. Registration page

Following implementation of the General Data Protection Regulation (GDPR), and in order to have greater control over data access, a verification registration process for new users manually

moderated by site admins will be implemented. Institutional and company email accounts are generally more secure and allow the professional identification of the individual, therefore the use of an institutional or company email address will be necessary to register.
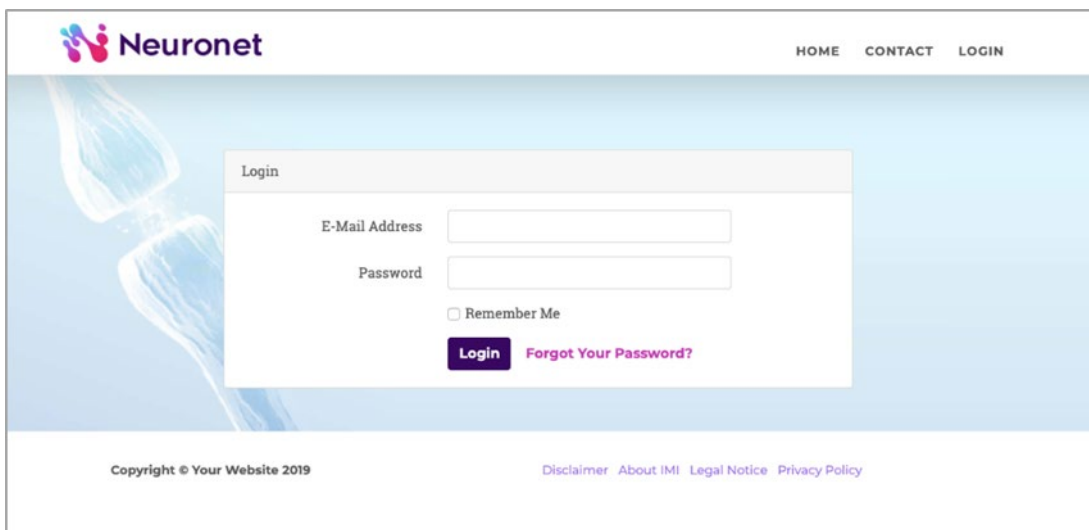
New users would be required to provide the following personal information:

- Name
- Institutional/company email address
- IMI ND project/s he/she participates in.
- Job position (e.g. Director, PhD student, Research assistant, Post-doc, etc.)
- Role in the project/s (e.g. Project Lead, Coordinator, Principal Investigator, etc.)
- Education (e.g. BSc, MSc, PhD, MD etc.)
- Area of expertise
- Institution/Company
- Country

An automatic email will be sent requiring the confirmation of the new user account as part of the verification process. Once the account is validated, the admin will still be able to decide whether or not to accept the new user in case of concerns about their identity.

6.   Log in page

The log in page will prompt users to complete the fields username and password for accessing the dashboard.

7. Dashboard prototype

The dashboard will provide an overview of the IMI ND programme at a glance.

The website is designed in three columns to optimize visualisation and user experience.

In the top right corner there will be the user menu, with options to edit user details, change password, etc.
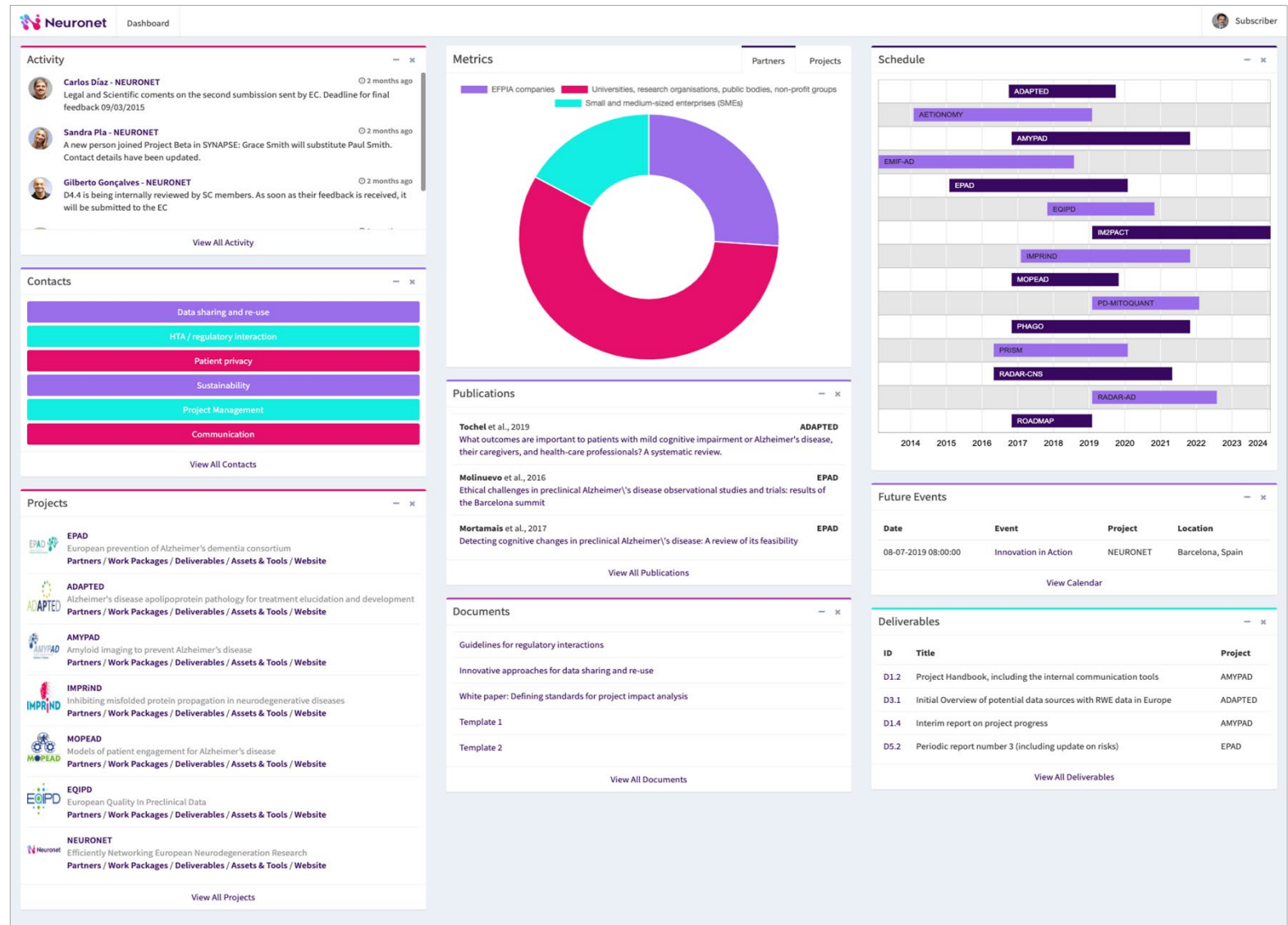
8. Modules in the dashboard

8.1. Projects

This module will list the IMI ND projects that are part of NEURONET. Besides the project logo, acronym and full title, additional project information will be accessible through the following five links: Partners / Work Packages / Deliverables / Tools/ Website

- Partners: List with partner institution names and countries.
- Work Packages: List of project Work Packages.
- Deliverables: List of project deliverables. Since some deliverables might contain confidential information, each project will decide the deliverables they wish to provide. The deliverables listed will be linked to the actual reports that might be available from the respective projects' websites.
- Tools: List of project developed tools, databases, cohorts, etc. Whenever possible, details about the team or organization sustaining the tools (i.e. acting as gate keepers) plus an overview of the type of data available in them will also be provided.
- Website: Link to the project website.
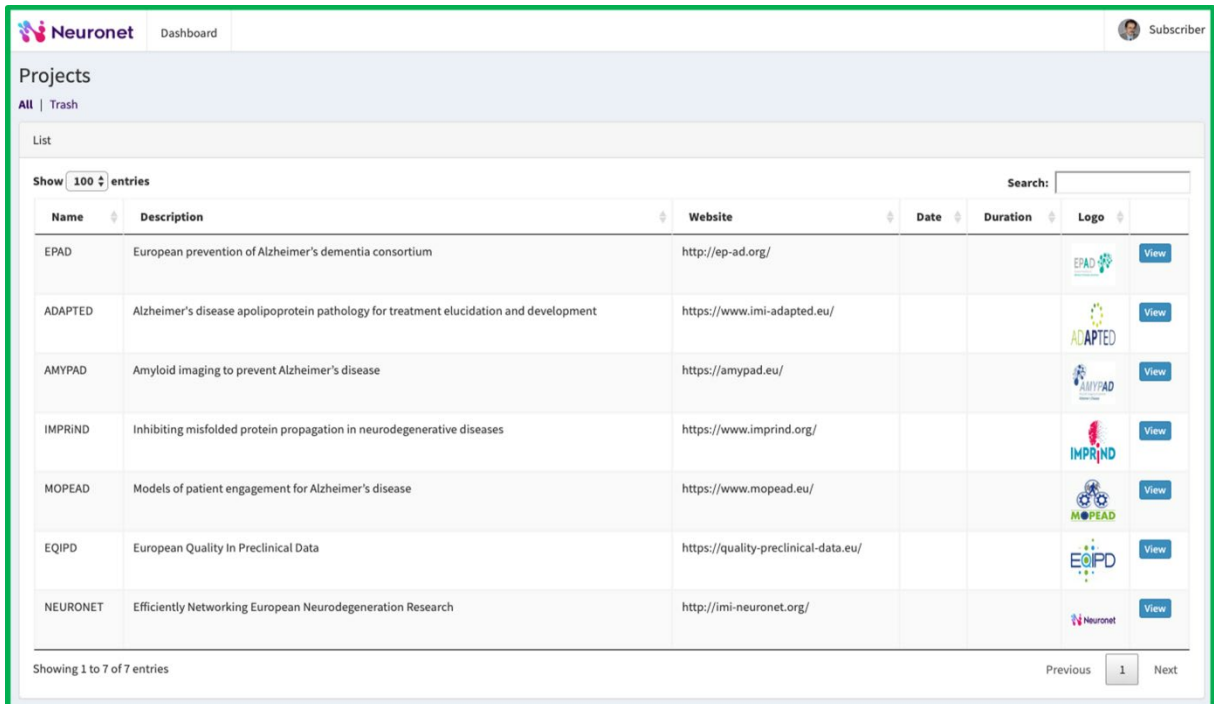
Logo	**AMYPAD**
	Amyloid imaging to prevent Alzheimer's disease
	Partners / Work packages / Deliverables / Tools / Website
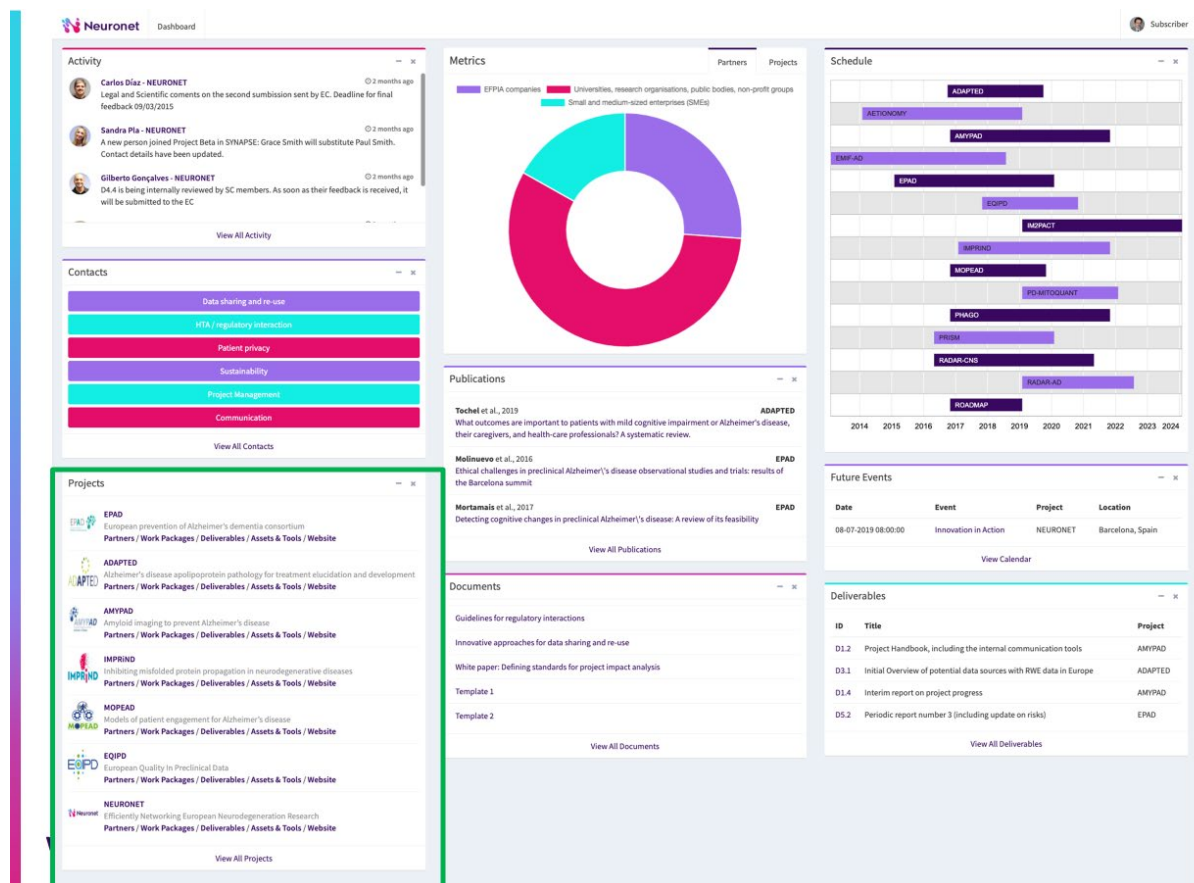
By clicking *View all projects* a new window will open, showing the complete list of IMI ND projects. This page will include a search bar in the top right corner.

8.2. Activity

This module will show short twitter-style messages from Coordinators/Project Leads and/or Project managers. The aim is to offer a space for communication between projects where they can post updates or make comments and requests.

All messages will display the user name, project acronym and date of publication. In case one user participates in several IMI projects (e.g. EPAD & AMYPAD) there should be a way to select the project that is related to the message being published (e.g. from a drop-down list).
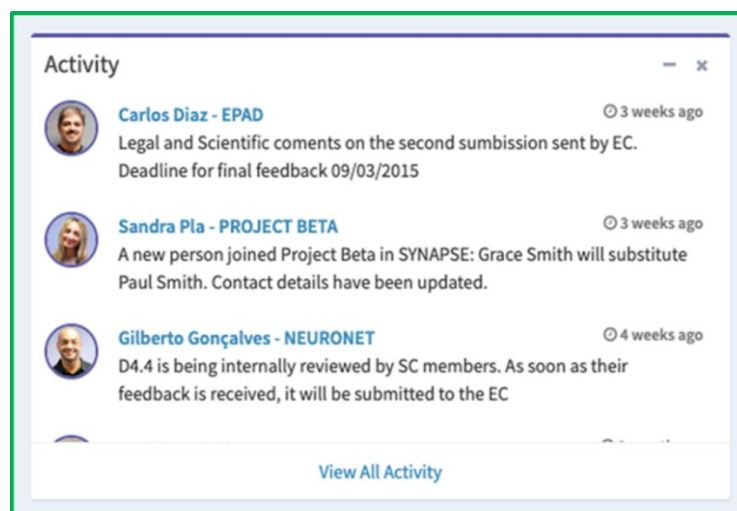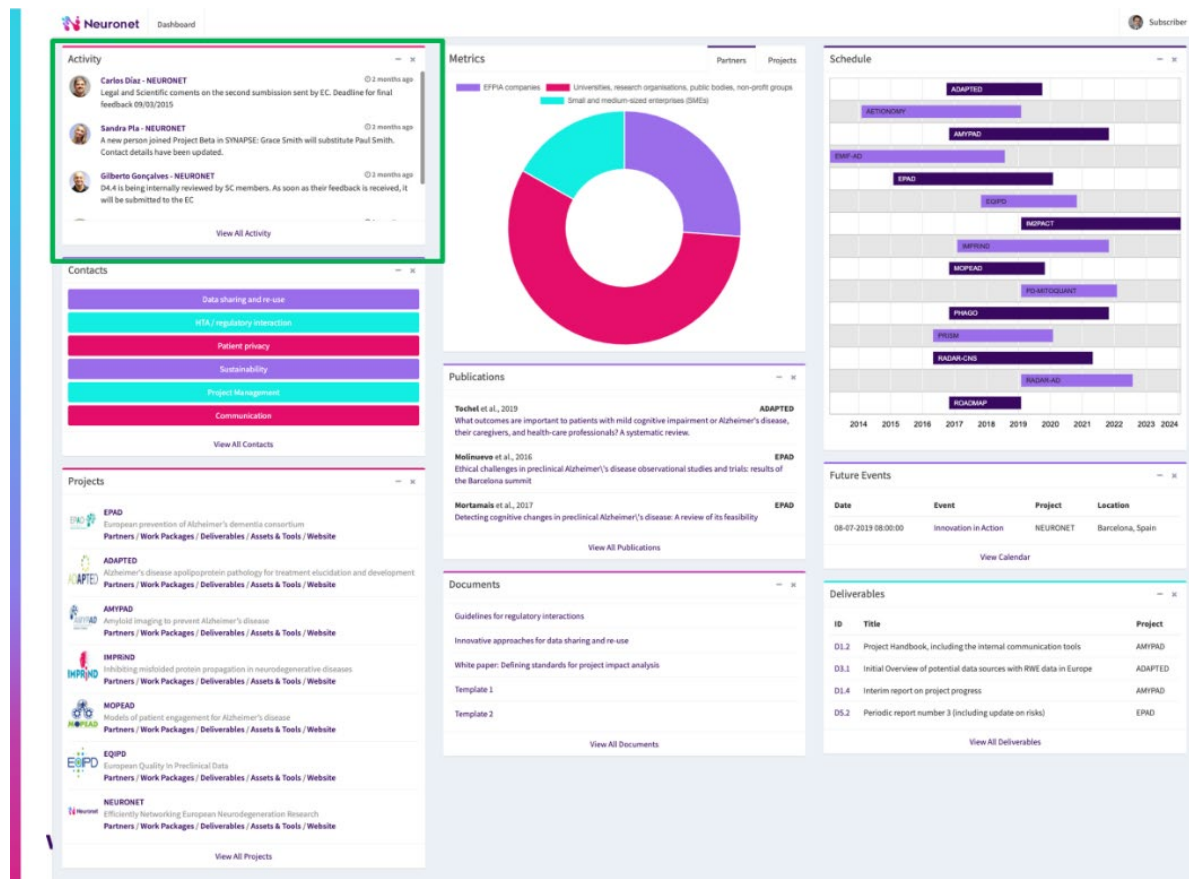
By clicking *View all activity* a new window will open, showing the complete list of messages available. It will include a search bar in the top right corner to allow users to search messages by project, by user, etc.

8.3. Contacts

This module will contain a list of selected experts (similar to the 'yellow pages') so that users can contact the appropriate experts for advice when needed and communication is enhanced throughout the programme.

NEURONET partner SYNAPSE will take on the responsibility of developing this module and its contents in compliance with GDPR.
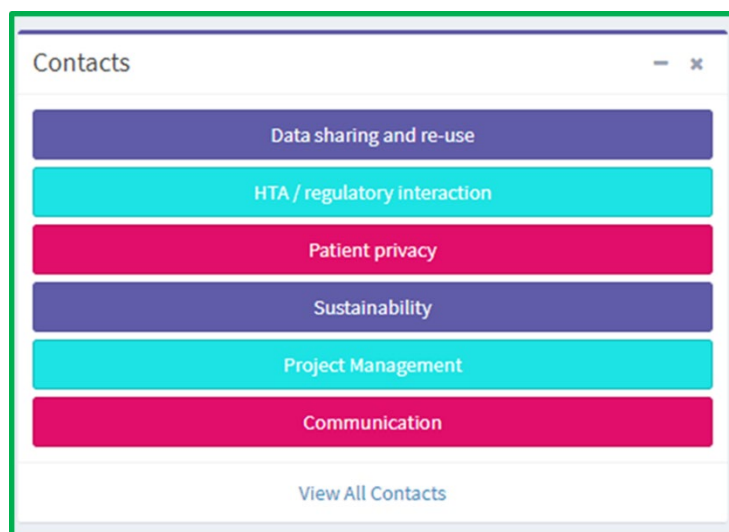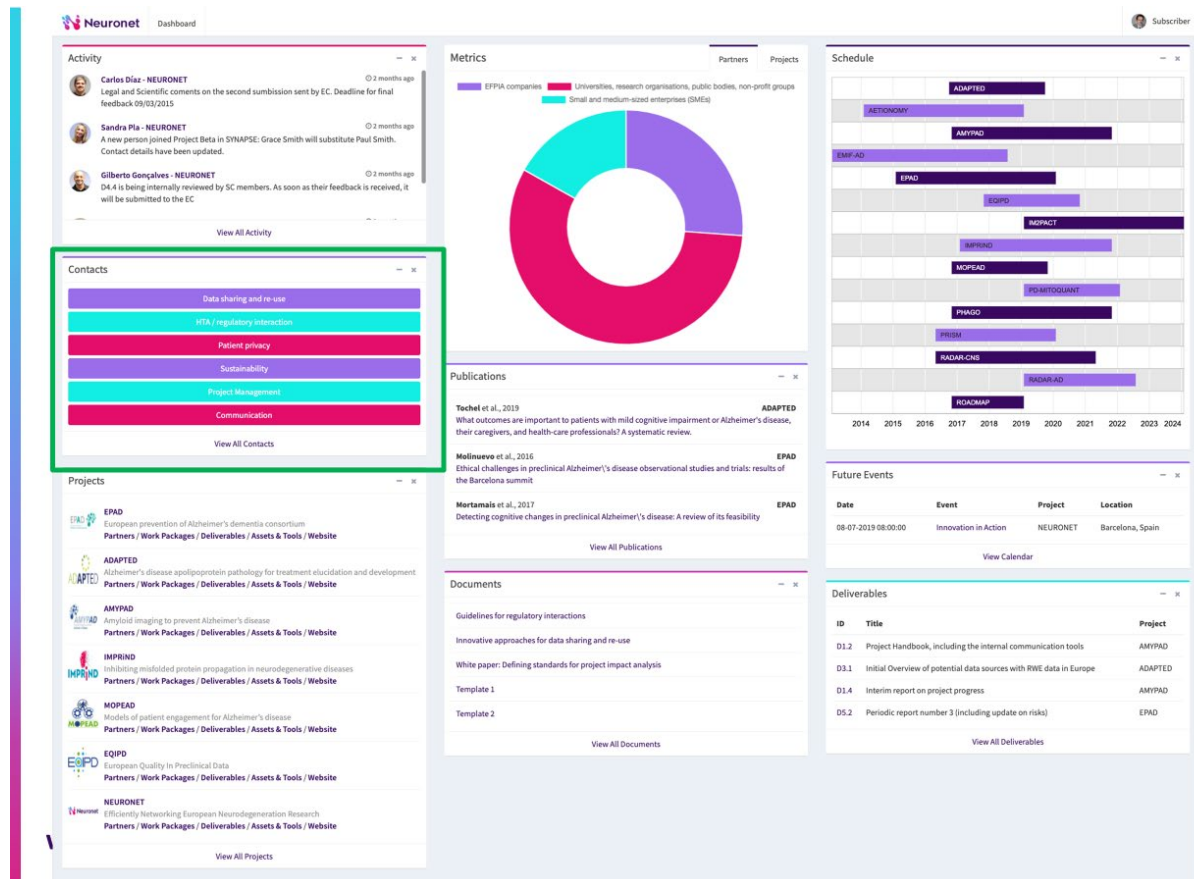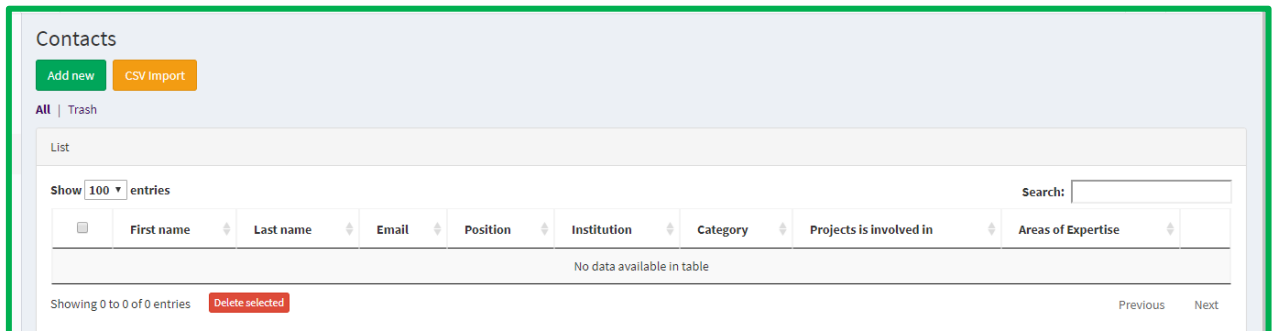
The contacts will be grouped into six categories or interest areas:

1. Data sharing & re-use
2. HTA/Regulatory interactions
3. Patient privacy & Ethics
4. Sustainability
5. Project management
6. Communication

By clicking on one category, a new window will open displaying a list with the contact details of experts in that area, including:

- Name
- Email
- Position (i.e. Head of Department X, Project Manager, etc)
- Institution
- Names of IMI ND project/s he/she is involved in
- Areas of expertise

The page will include a search bar in the top right corner to allow users to search the contact details of experts by project, expert name, area of expertise, etc.

8.4. Documents

This module will contain a list of documents that might be relevant for all IMI ND projects, such as guidelines, templates, white papers, etc. The documents could come from NEURONET, from the IMI ND projects or from external sources.

The documents might be organised into the six categories or interest areas used in the *Contacts* module. This will be explored for the next version of the KB.

The list of documents will contain:

- Document title
- Date of publication
- Document source
- Keywords
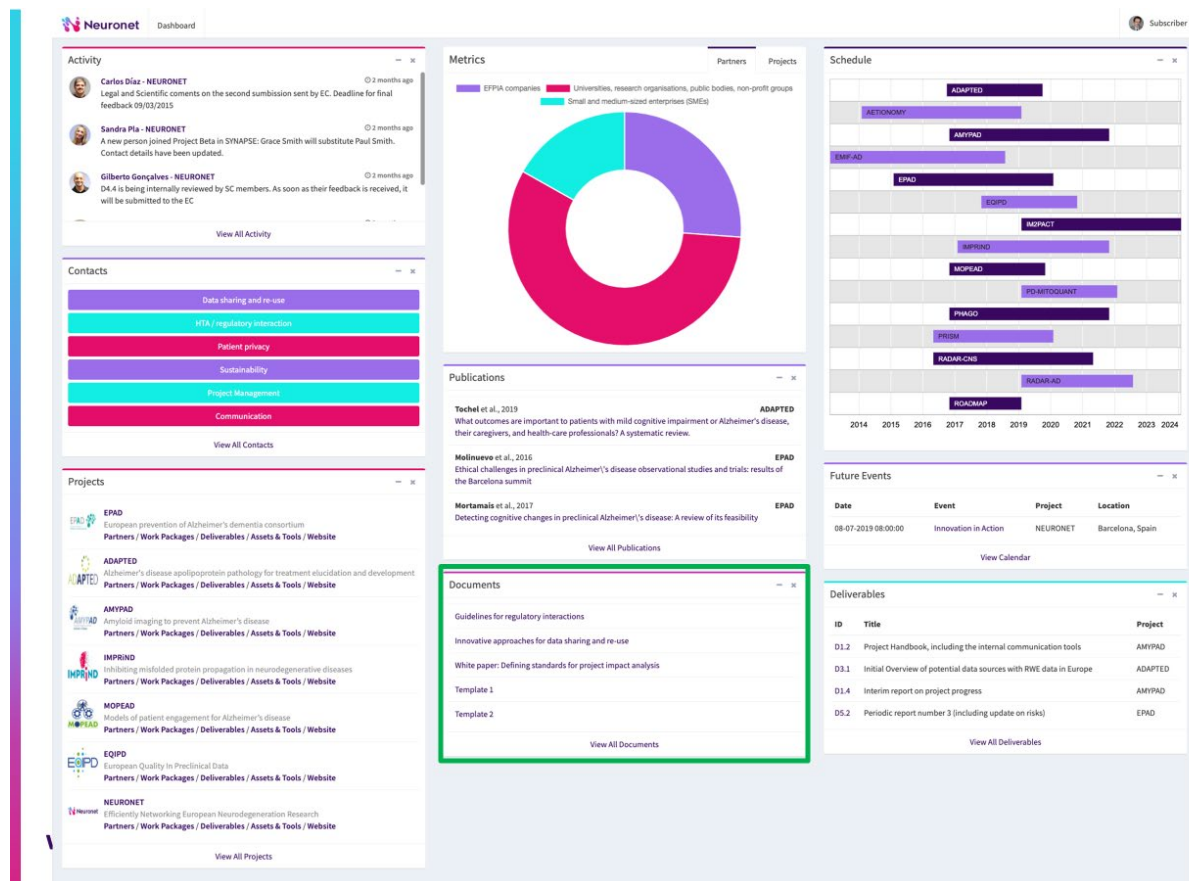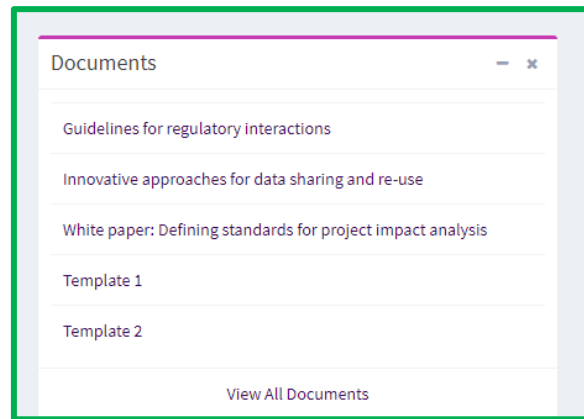
By clicking *View all documents* a new window will open, displaying the complete list of documents available. This page will include a search bar to allow users to search documents containing specific keywords (e.g. biomarkers, dementia, etc.). Users will be able to download a copy of the documents through the download link provided.
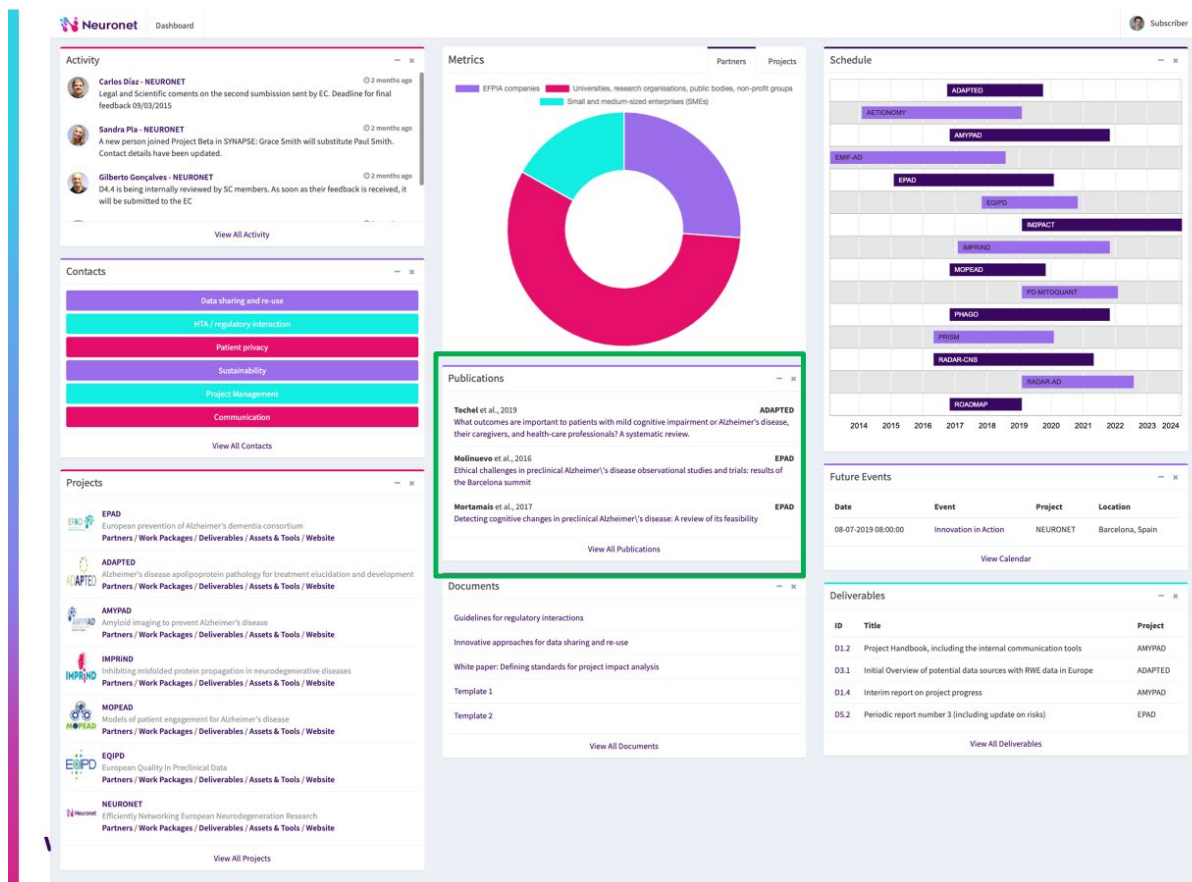
8.5. Publications

This module will show relevant publications from IMI ND projects containing the required IMI JU acknowledgement. The list of publications will show:

- First author surname
- Year of publication
- Title
- Project
- Keywords
- Link to publication (DOI)

Each IMI ND project will freely decide which of their publications they would like to list in the KB.

By clicking *View all publications* a new window will open, displaying the complete list of publications available. The page will include a search bar to allow users to search publications by project, author, year, etc.
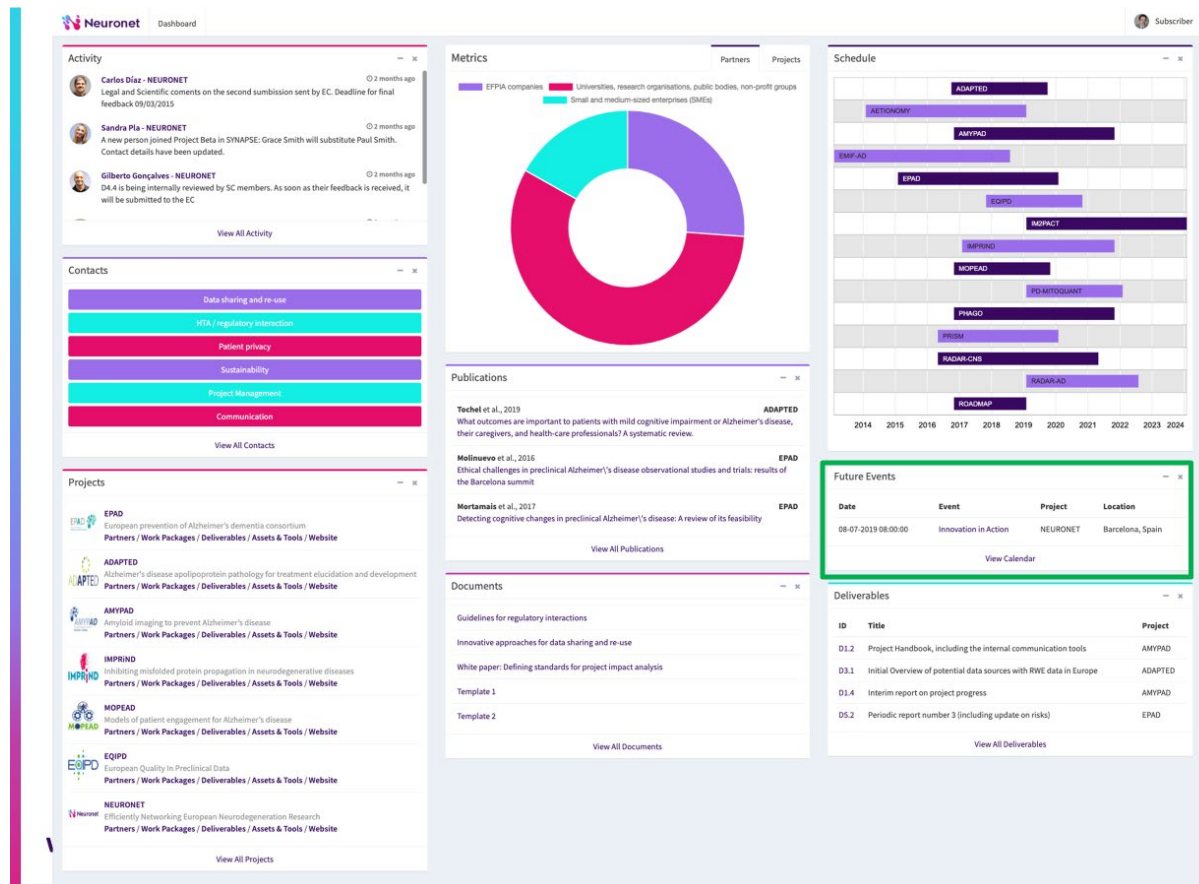
8.6. Events

This module will display information about events, conferences and meetings that might be relevant for the NEURONET community. The list will include:

- Event name
- IMI ND project involved (if applicable)
- Event date
- Location

By clicking *View all events* a new window will open displaying the complete list of events. The page will Include a search bar to allow users to search by project name, event location, etc.

Show 100 ▼ entries   Search: [   ]

|	Date	Event	Project	Location	
☐	21-03-2019 14:00:00	NEURONET Kick-off Meeting	NEURONET	Madrid, Spain	View Edit Delete
☐	27-05-2019 09:00:00	BIO-Europe 2019		Paris, France	View Edit Delete
☐	10-10-2019 11:23:25	AMYPAD General Assembly	AMYPAD	Barcelona, Spain	View Edit Delete
☐	24-10-2019 11:24:07	Alzheimer Europe Conference 2019		The Hague, Netherlands	View Edit Delete

Showing 1 to 4 of 4 entries   Delete selected   Previous 1 Next

8.7. Metrics

The contents of this module are still being discussed. The currently preferred option is to display here some of the indicators or project data collected by WP1, but also to provide some Key Performance Indicators related to NEURONET's own progress.
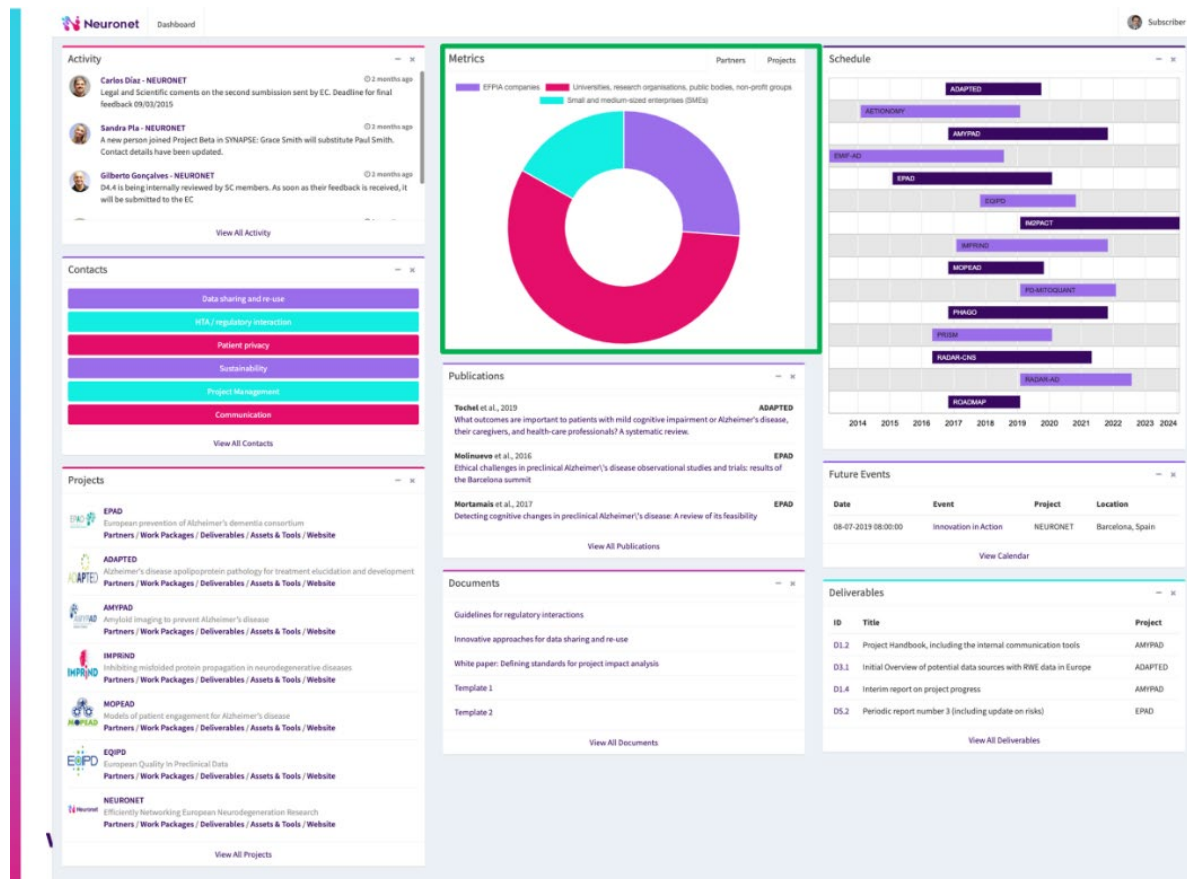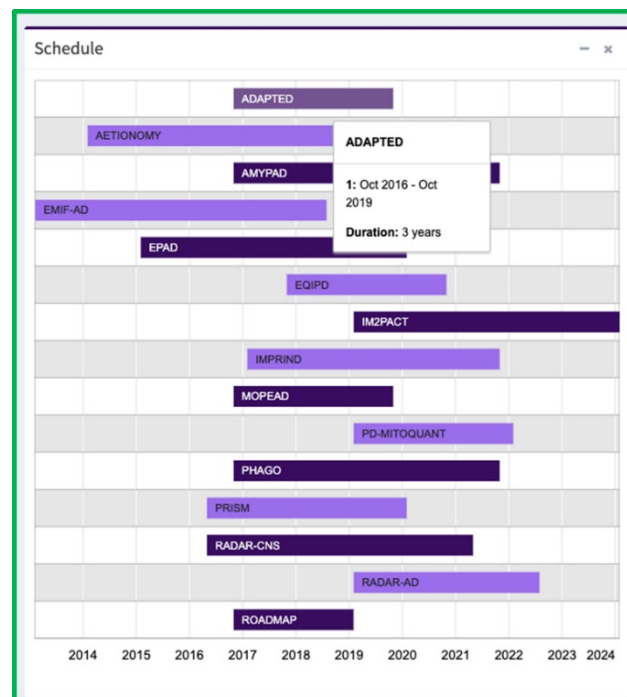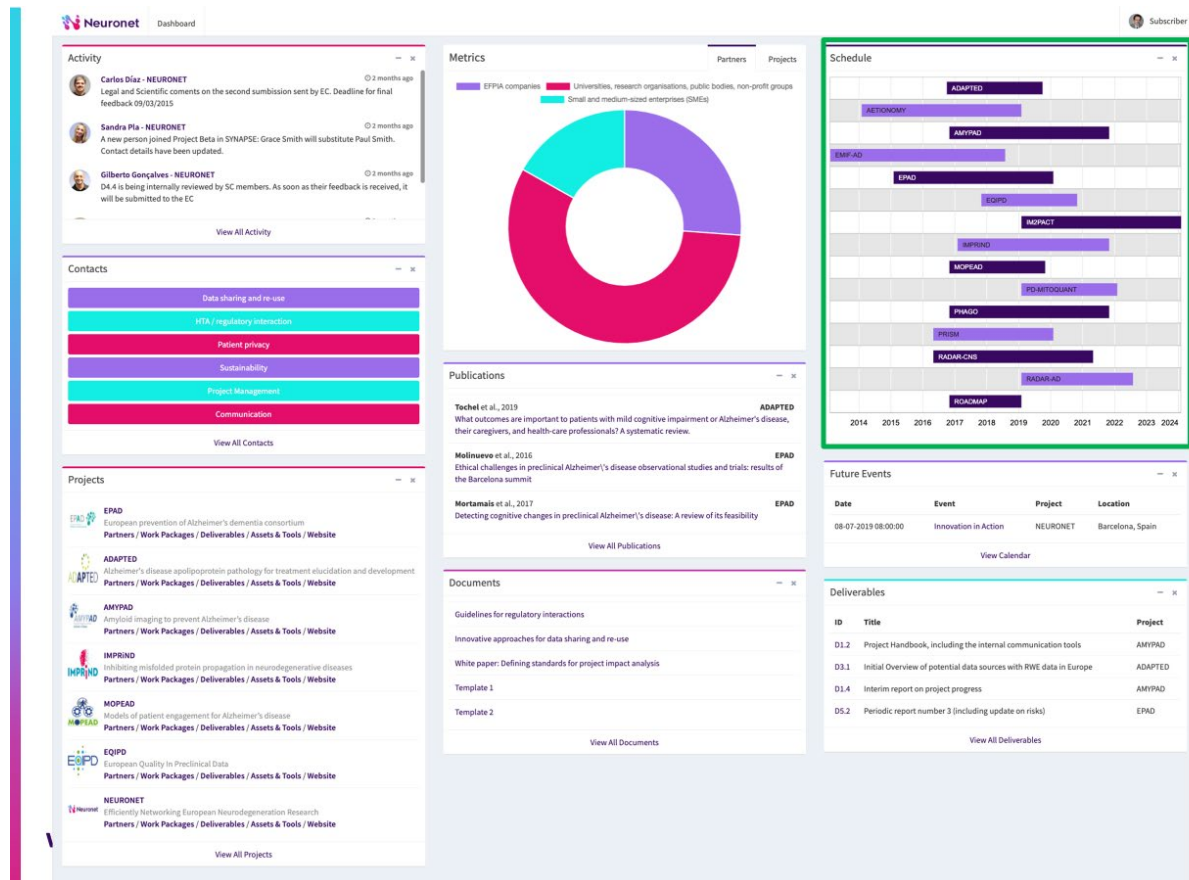

Data could be presented using different graphs and figures:
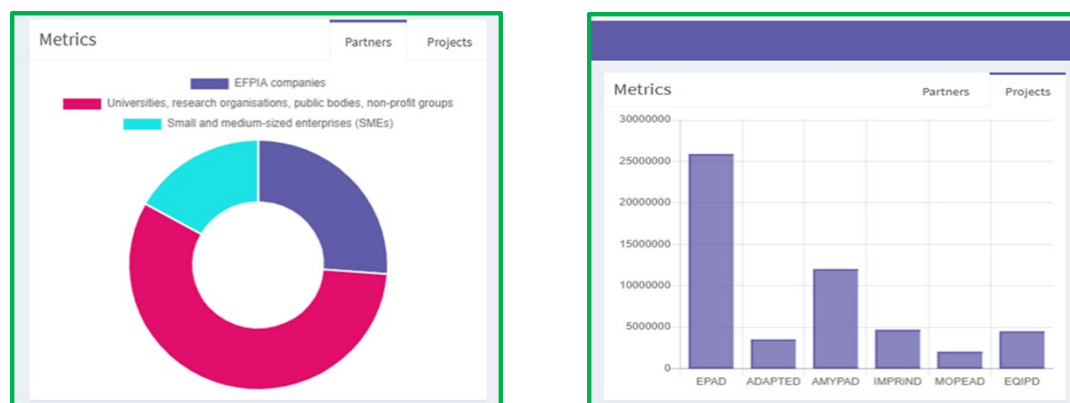
8.8. Schedule

This module will provide a meta-Gantt chart for all IMI ND projects. Colour codes might be used to see the commonalities across projects (e.g. by IMI call or by research area).
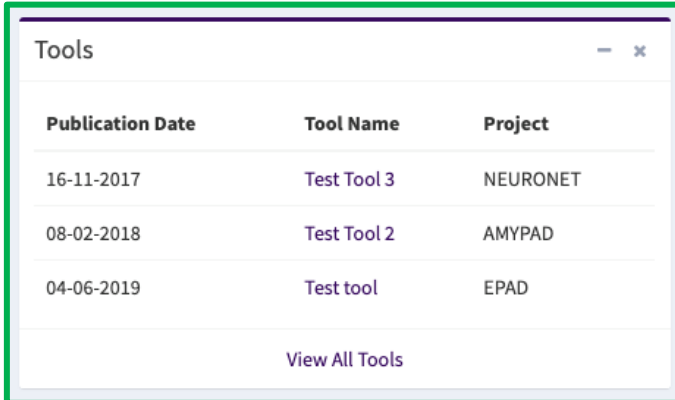
8.9. Tools

This module will contain a list of project developed tools, including databases, cohorts, etc. Whenever possible, details about the team or organization responsible for the tools (i.e. acting as gate keepers) plus an overview of the type of data available in them will be provided.

The list of tools would include:

- Tool name
- Project
- Publication date
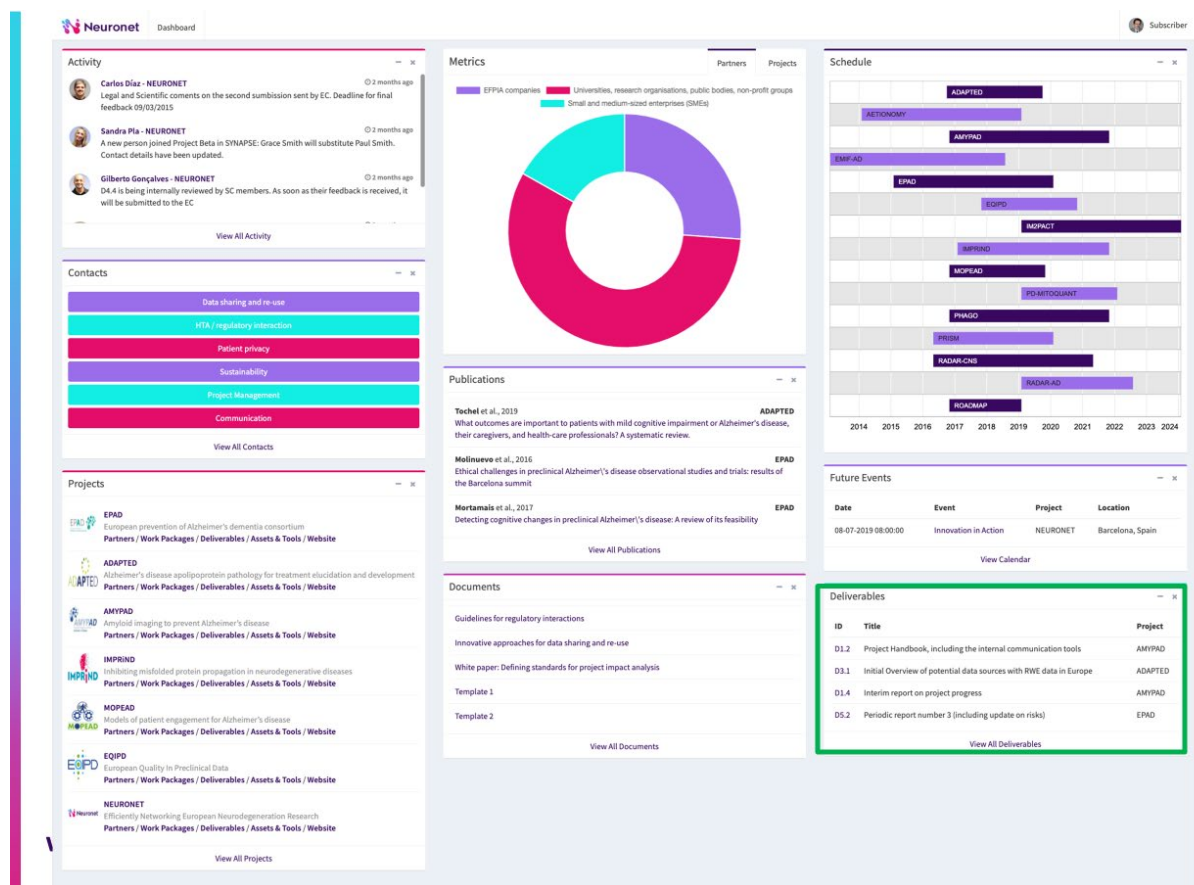- Type of data available
- Keywords
- Tool URL (if applicable)

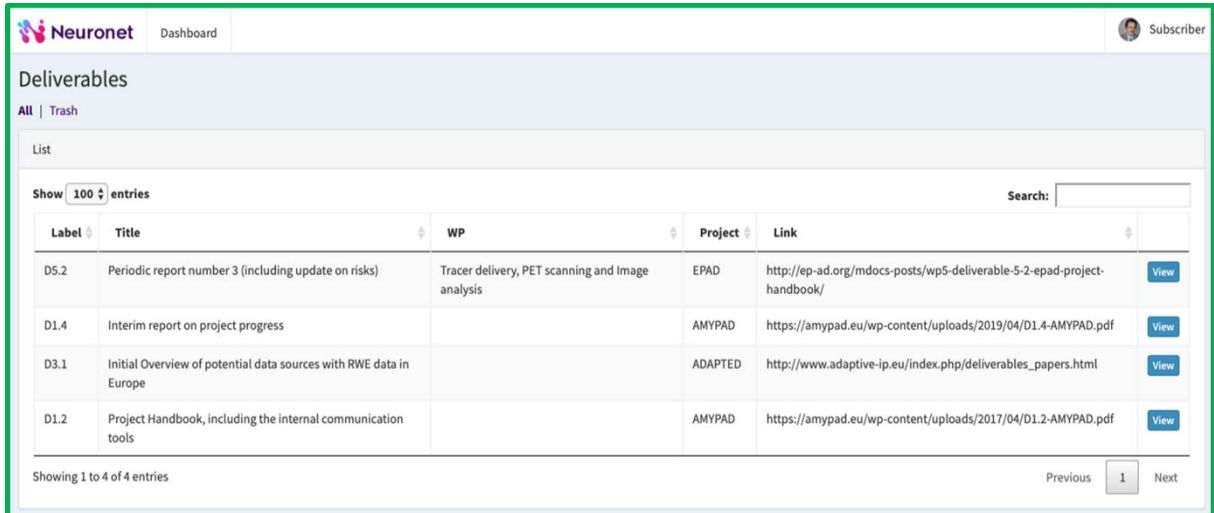| Tools		− ✕
Publication Date	**Tool Name**	**Project**
16-11-2017	Test Tool 3	NEURONET
08-02-2018	Test Tool 2	AMYPAD
04-06-2019	Test tool	EPAD
	View All Tools	

8.10. Deliverables

This module will provide a list of deliverables from IMI ND projects. Since some deliverables might contain confidential information, each project will decide which reports can be accessible through the the KB. The deliverables list will include:

- Deliverable title
- Project
- Date of submission
- Keywords

By clicking *View all deliverables* a new window will open displaying all deliverables from all projects. Whenever available, the deliverables listed will be linked to the actual reports that might be available from the respective project websites. The page will include a search bar to allows users to search deliverables by project, by keywords, etc.

9.   Next steps

After months of thinking and debating, the structure, design and contents of the NEURONET Knowledge Base have finally been agreed by NEURONET partners. Furthermore, a presentation about this web platform for the IMI ND programme was also given to members of the NEURONET Scientific Coordination Board on the occasion of their first meeting held in Madrid on 2nd July 2019, and the feedback received about the proposed design has been positive.

The next steps will entail the development of the tool, including the implementation of the changes recently agreed by the team and the initation of the testing phase. Once the KB structure is built and tested, NEURONET partners and the designated persons from each IMI ND project will be able to upload the information into the web platform. An update on the structure and function of the NEURONET INKB web platform, in the form of a deliverable (D3.6) will be produced by month 18.