

Monitoring and Self-evaluation tools



05.04.2022



10:00 - 11:30 AM CET

Hosts:

- SYNYO GmbH, Austria
- Institute of Communication and Computer Systems, Greece















INCREASE

UPTAKE











Agenda

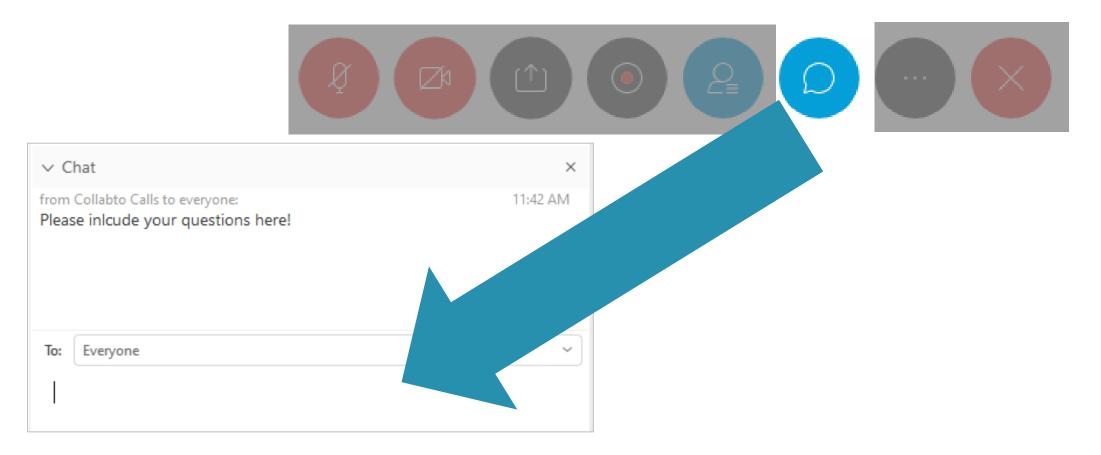


Times are only indicative

Time	Topic	Presenter
10:00 - 10:10	Welcome and introduction to the webinar, its goal and expected outcome	Alexander Nikolov SYNYO GmbH, Austria
10:10 - 10:15	PlatformUptake.eu Open Information Hub, registration process, navigation to the tools	Alexander Nikolov SYNYO GmbH, Austria
10:15 - 10:45	Tool for platform providers	Efstathios Karanastasis Institute of Communication and Computer Systems, Greece
10:45 - 11:15	Tool for technology developers	Efstathios Karanastasis Institute of Communication and Computer Systems, Greece
11:15 - 11:30	Questions and Discussion	Alexander Nikolov SYNYO GmbH, Austria



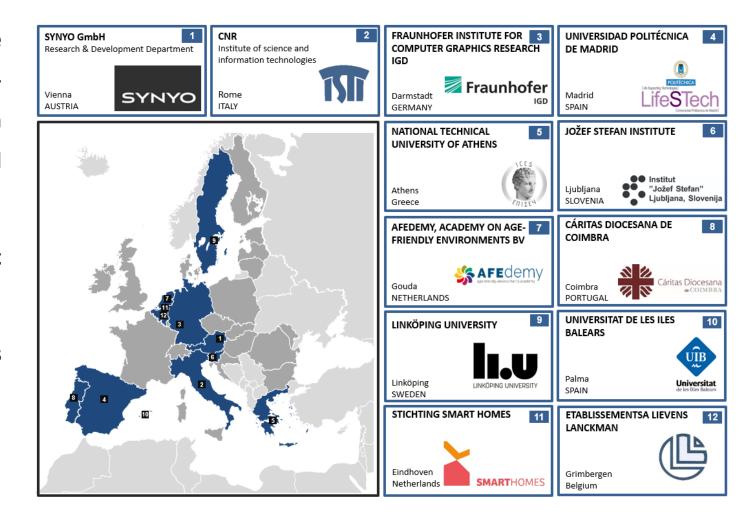
All participants are kindly invited to raise questions in the chat.



Introduction to PlatformUptake.eu

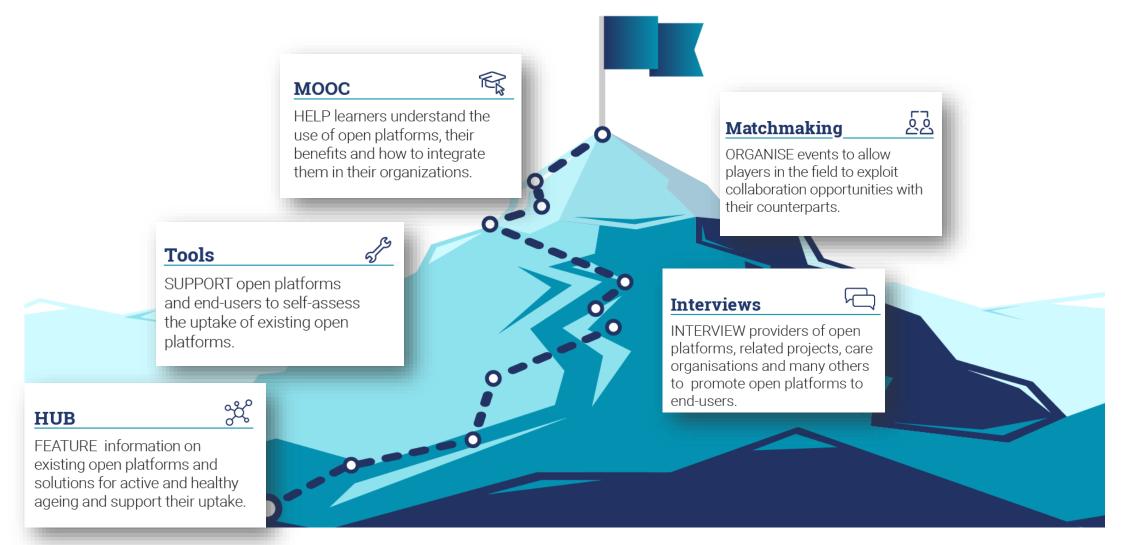


- PlatformUptake.eu: Assessing the State
 of the Art and supporting an evidencebased Uptake and Evolution of Open
 Service Platforms in the Active and
 Healthy Ageing Domain
- Project Type: Coordination and SupportAction
- Project duration: 29 months
 (01/01/2020 31/05/2022)
- Partners: 12 from 10 countries



Current achievements





Gaps and challenges for uptake of open platforms in AHA/AAL domains



UPTAKE OF OPEN PLATFORMS

Regulations and policies



- Unified policies and standards
- Data silos
- Laws and regulations applicable for new digital services

Communication strategy



- Increased visibility
- Promotion of benefits, including economic aspects
- Strong engagement by stakeholders and contribution to platform's success
- Financial support beyond funding period

Business model



- Two sided market
- Transition to the market
- Key metrics to sustain the platform uptake
- Establishment of entity to further develop, advertise and acquire first end users

GAPS AND CHALLENGES

Matchmaking events





Matchmaking Events!

Involvement



Organisations from the supply and demand sides get involved in the matchmaking process.

Registration & upload of pitch



Interested organisations register for the events and upload their pitch decks on the Open Information Hub.

Pitch



Registered for the events organisations make a pitch to present their needs and offers.

Knowledge exchange & events



The "couples" which have participated in the matchmaking events and sent their pitch decks get engaged.

Networking Opportunities



PlatformUptake.eu Consortium

12 consortium organisations and connected networks (Universities, SMEs, End user organisations)



45+ Projects and initiatives AHA, ALA, Health care, IoT etc.



Locations
10 countries in Europe



10+ Projects events

Matchmaking, MOOCs, Open Information Hub Tools, Capability gaps and Innovation needs and more



Networks

IEEE, CEN, IN4AHA, IDIH, 50plus Hellas, SHAFE, Nerosubianco, EEN, NET4Age, ECHAlliance etc.



PlatformUptake.eu Open Information Hub, registration process, navigation to the tools

Alexander Nikolov

SYNYO GmbH, Austria



















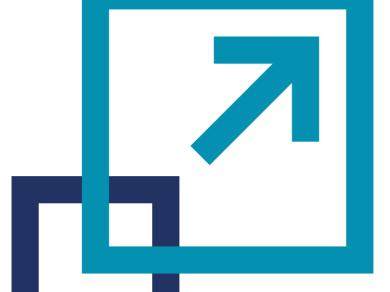






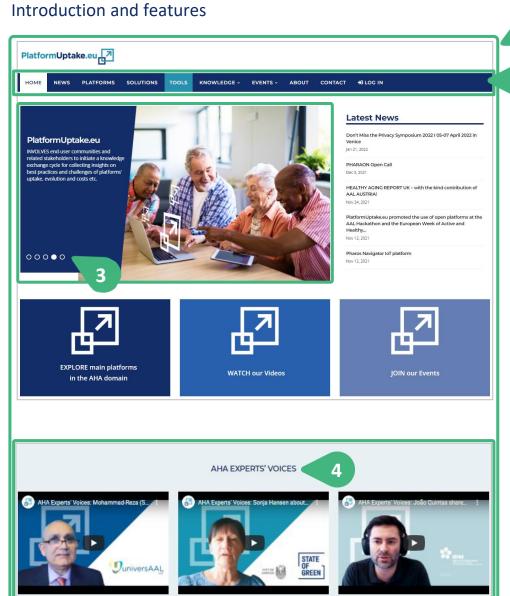








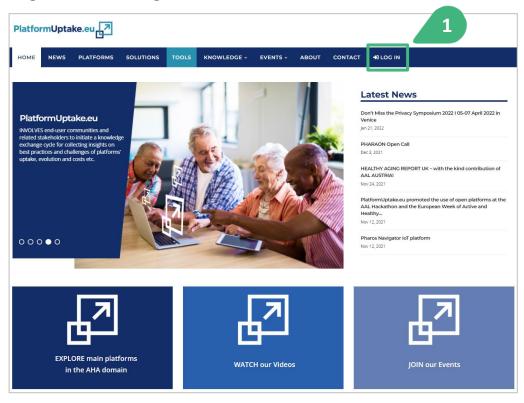




- 1) HOME page of the PlatformUptake.eu Open Information Hub
- 2) Navigation bar (with buttons and drop-down menus) and links to the main categories
- 3) Slider, comprising project related images and text
- 4) Other **linked sections** in the Hub, such as AHA EXPERT'S VOICES, provide valuable inputs for the project's stakeholders

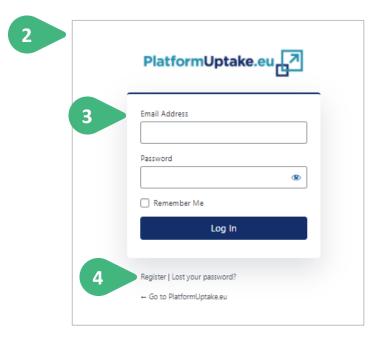
PlatformUptake.eu 7

Registration and login





- 1) Click on the **LOG IN** menu in the navigation bar of the Hub to register or log in before accessing the tools for platform providers and technology developers
- To complete the login or registration, a new screen opens:

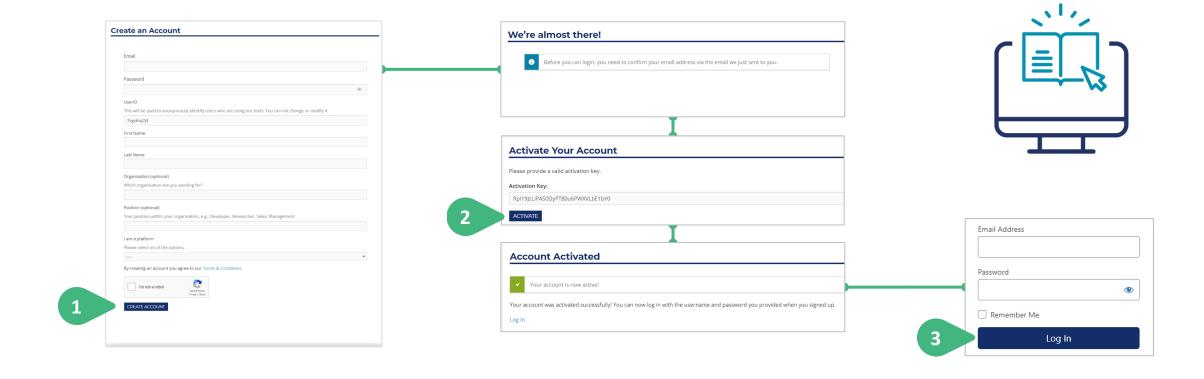


- Provide your Email Address and Password.
- 4) If not registered yet, click on **Register** to go through the registration process.



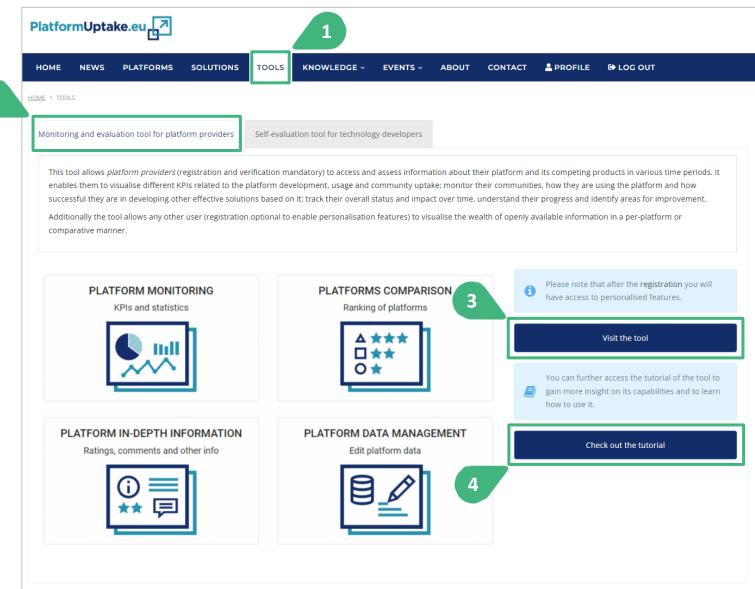
Registration and login

- 1) Create an account by providing your details and your email address.
- 2) Verify your email address by providing a valid Activation Key, that was sent to your email, to Activate Your Account.
- 3) Once the account is successfully activated, Log in to the PlatfromUptake.eu Open Information Hub and use all its features and functionalities.



PlatformUptake.eu 7

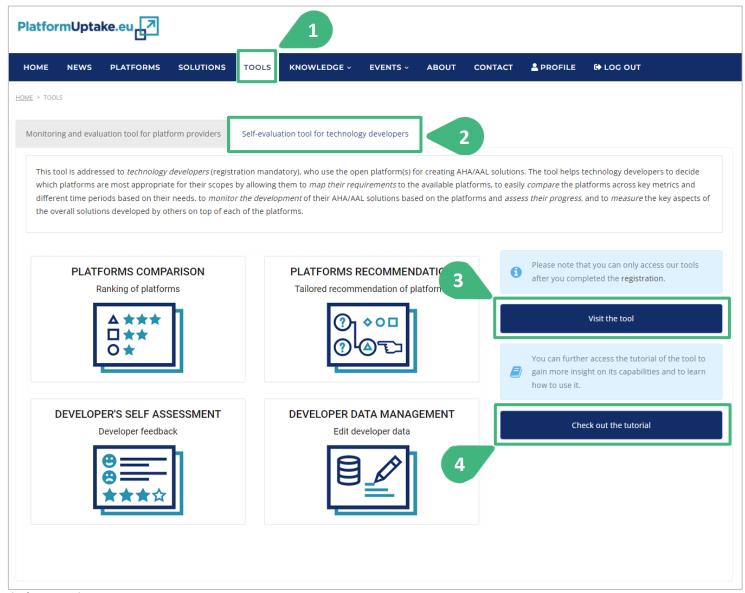
Navigation to the tool for platform providers



- 1) Click on the **TOOLS** menu in the navigation bar of the Hub to access the tools page.
- 2) After selecting the first tab "Monitoring and evaluation tool for platform providers", you can view the main information of the Tool for platform providers.
- 3) Click the **Visit the tool** button to load and display the tool.
- Click the Check out the tutorial button to display the tutorial.

PlatformUptake.eu 7

Navigation to the tool for technology developers



- Click on the **TOOLS** menu in the navigation bar of the Hub to access the tools page.
- 2) After selecting the second tab "Self-evaluation tool for technology developers", you can view the main information of the Tool for technology developers.
- By clicking the **Visit the tool** button, the tool itself will be loaded and displayed.
- Click the Check out the tutorial button to display the tutorial.



Monitoring and Self-evaluation Tools

Efstathios Karanastasis

Institute of Communication and Computer Systems, Greece





























Monitoring and Self-evaluation Tools

PlatformUptake.eu 2

Introduction to the main concepts (1/2)

Key Performance Indicators (KPIs)

- Measurement: every 3 months
- Type: Quantitative or Qualitative
- Category: Six available
- Dimension: Three available
- User Cluster: Four available
- Original value (O)
- Normalised value (N): [0, 1, 2, 3, 4]
- Weight (W): The importance of the KPI [0, 10]

Normalised Score (S) of a particular period (n) [0, 100]

$$S_n = \frac{\sum_{i=1}^k N_{n,i} \times W_i}{\sum_{i=1}^k W_i} \times 25$$

Score trend (T) between current period
 (n) and the previous one (n-1)

$$T_n = \Delta(S_n - S_{n-1})$$

Monitoring and Self-evaluation Tools

Introduction to the main concepts (2/2)



Statistics metrics

- Measurement: every 6 months
- Type: Percentage or plain number

Contextual questions

- Platform characteristics
- Structured questions (set of predefined answers)

Developer questions

- Category:
 - Developer characteristics
 - Solution characteristics
 - Platform assessment
- Type:
 - Rating
 - Text
 - Rating & Text
 - Structured (set of predefined answers + other answer)



Efstathios Karanastasis

Institute of Communication and Computer Systems, Greece























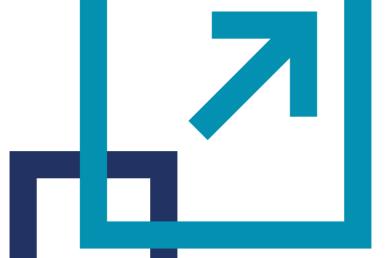
S AFEdemy













Mainly aims to cover the needs of platform providers

- Enables platform providers to:
 - see in a visualised manner different KPIs related to the platform development, usage and community uptake;
 - monitor their communities, how the latter are using the platform, how much successfully they are using it for developing effective solutions;
 - evaluate technology uptake by different user-groups, monitor the development of solutions based on their services, measure economic benefits and potential impact on the ageing society;
 - identify the competitive advantages and limitations of their platforms in various areas and through various methods;
 - assess the uptake and evolution of the platforms over time, identify and further dig on the advantages and weak points of their platform, and understand its positioning and uptake potential;
 - be supported in the decision-making process when it comes to identifying and/or prioritizing areas of improvement or stakeholders to focus on;
 - track their overall development and impact and understand their progress or obstacles;
 - perform the evaluation process on their own and promote the uptake of their platforms even beyond the completion of the PlatformUptake.eu project.

Tool users, roles and functionalities







Role: Visualise the wealth of available information in a per-platform or comparative manner.

Functionalities: Platform monitoring [customisation possible, if registered], platforms comparison.



Platform provider

Role: Visualise different KPIs, statistics metrics and developers' feedback related to the development, usage and community uptake of their platform(s); monitor their communities and understand their needs.

Functionalities: Platform monitoring, platforms comparison, platform in-depth information [only for own platform(s)], platform data management [only for own platform(s)]



Administrator

Role: Perform maintenance operations and manage the underlying data, including the introduction of new data and the update of existing ones.

Functionalities: Platform monitoring, platforms comparison, platform in-depth information, platform data management.



Tool for technology developers

Efstathios Karanastasis

Institute of Communication and Computer Systems, Greece



















This project has received funding from the European Union's Horizon 2020 Research and Innovation Action under Grant Agreement No 875452.



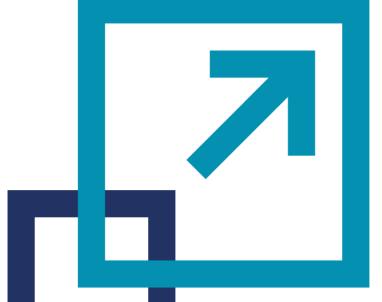












Tool for technology developers



Mainly aims to cover the needs of technology developers

- Enables technology developers to:
 - evaluate and compare platforms, which could serve as the basis for and facilitate throughout the development of solutions in the AHA/ AAL domains, across key metrics and different time periods;
 - cover different dimensions of comparison, including amongst others functionality, sustainability and data privacy aspects;
 - provide feedback regarding their experience from using the platforms across different aspects, express their unmet requirements, find weak points and point out the strong ones;
 - measure the key aspects of the overall solutions developed for each of the platforms;
 - compare their experience in each aspect with that of other developers using the same platform;
 - be supported across the decision-making process when it comes to choosing which platform solution to base their developments on;
 - get tailored recommendation of platforms on their expressed expectations, which are subsequently rated and ranked on the basis of their set priorities;
 - monitor the development of their AHA / AAL solutions based on the platforms;
 - update their feedback and view its changes over time, as they go back in the development process;
 - self-assess their progress in using the platforms over time until a successful product / solution has been built.

Tool for technology developers

Tool users, roles and functionalities





Technology developer

Role: Visualise different KPIs, statistics metrics and other developers' feedback related to the development, usage and community uptake of the platforms in a comparative manner; get tailored platform recommendations based on their expectations and priorities; assess the evolution of their own developments over time.

Functionalities: Platforms comparison, platforms recommendation, developer's self-assessment.



Administrator

Role: Perform maintenance operations and manage the underlying data, including the introduction of new data and the update of existing ones.

Functionalities: Platforms comparison, platforms recommendation, developer's self-assessment, developer data management.









Questions and Discussion

Upcoming project activities

PlatformUptake.eu 7

SCAN ME!

Registration: www.platformuptake.eu/matchmaking-events-and-webinars/

PlatformUptake.eu & AAL Austria MATCHMAKING | # 2

HIGHLIGHT the benefits of your platform's services, present your solution for Active and Assisted Living, share your requrements and needs for digital health care delivery and FIND your partner!

29.04.2022

() 10:00 AM - 12:00 PM CET

Hosts: • SYNYO GmbH • Lievens-Lanckman





















This project has received funding from the European Union's Horizon 2020 Research and Innovation Action under Grant Agreement No 875452.



SAFEdemy













Thank you for your participation!

Contact us, get involved, stay updated:



office@platformuptake.eu



www.platformuptake.eu

Meine Video

Musik
 Sport
 Gaming
 Filme



@PlatformUptake



Assessing the State of the Art and Supporting the Large Scale Uptake of Open Service Platforms in the #ActiveAgeing #HealthyAgeing #AHA #AAL Domain

Platformuptake.eu III Joined December 2019



Efstathios Karanastasis

Institute of Communication and Computer Systems, Greece























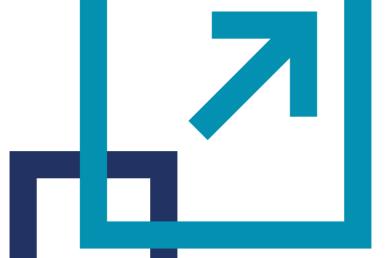
S AFEdemy











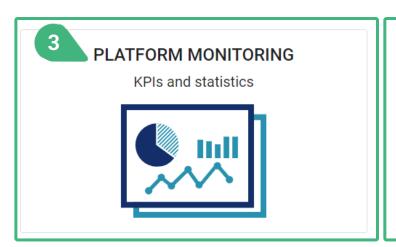
Tool for Platform Providers | Usage scenarios

Main screen - Home



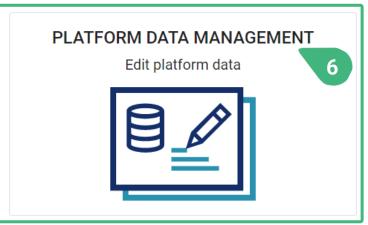


Home ♣ Administrator









- 1) The role of the user currently active determines whether the user has access to functionalities/usage scenarios or not.
- 2) The main screen (**Home**) of the tool includes four cards, one for each of the main functionalities of the tool:
- **3) Platform monitoring:** Monitor and evaluate the uptake of a particular platform.
- 4) Platforms comparison: Compare among platforms from different perspectives, including technical and financial ones.
- 5) **Platform in-depth information:** Gain in-depth insight for the self-evaluation of a platform.
- **6) Platform data management:** Management of the platform data.

The cards that are accessible to the logged in user (depending on the role) are shown with a blue and turquoise coluored icon. By clicking on any of these cards the user gets access to the selected functionality of the tool. In the case of the shown user role (Administrator), all available functionalities of the tool are accessible to this user.

Tool for Platform Providers | Usage scenarios

Main screen - Home



Home

Unregistered user

PLATFORM MONITORING

KPIs and statistics



PLATFORMS COMPARISON

Ranking of platforms



- 1) This is the case of an "Unregistered user".
- 2) If the stored permissions do not allow the user to access one of the functionalities, then the relevant card that is unavailable to this user role is shown with a black and grey colored icon.
- 3) When clicking on any of these unavailable cards, an appropriate message will be presented to the user.

3

Not available

PLATFORM IN-DEPTH INFORMATION

Ratings, comments and other info



PLATFORM DATA MANAGEMENT

Edit platform data

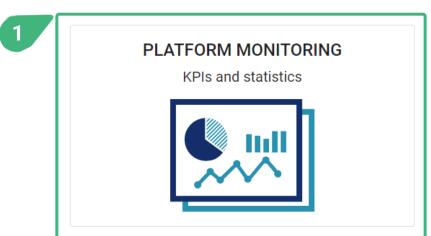


Please login with an authorised user account to access this functionality

PLATFORM MONITORING

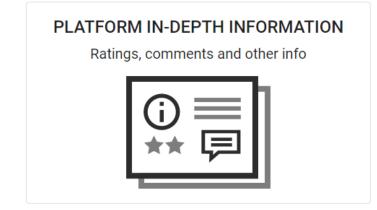
Accessible to user roles platform provider, regular user and administrator

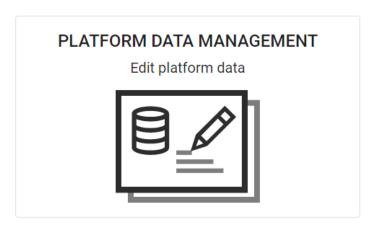
Home & Regular user



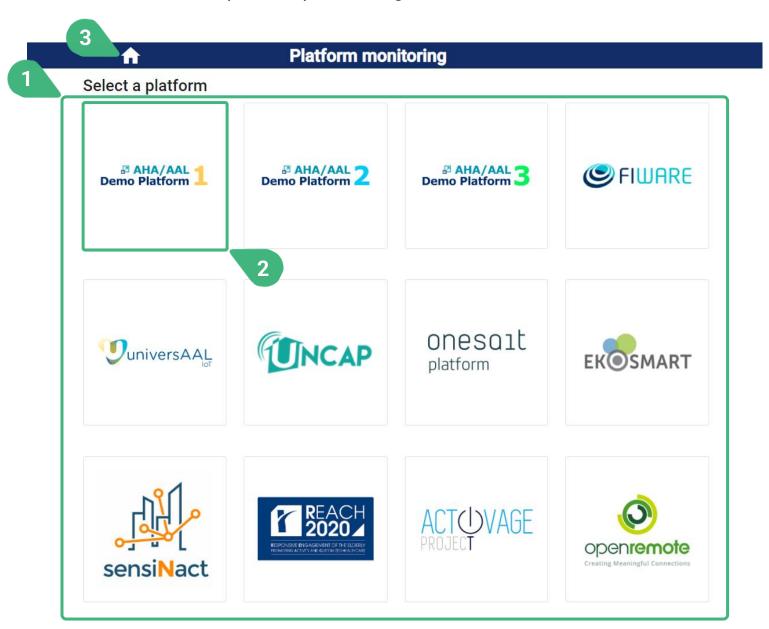


1) The user clicks on the **Platform monitoring** card.

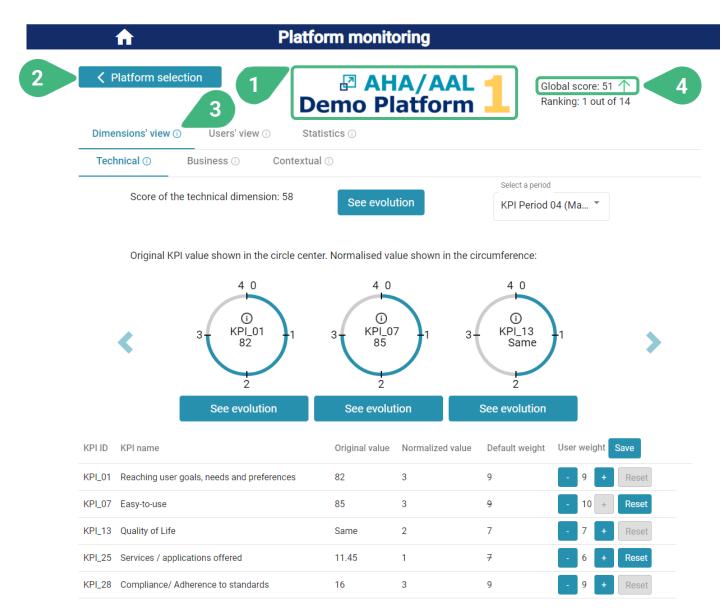




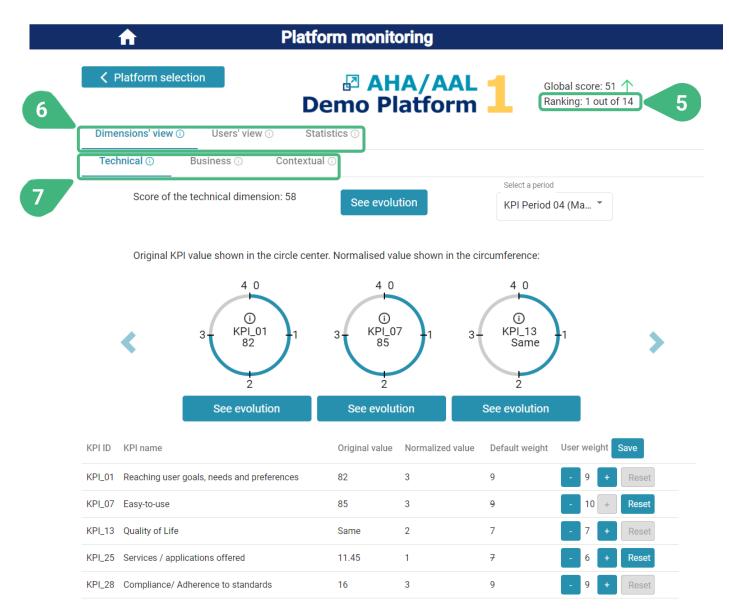
PLATFORM MONITORING | Platform selection



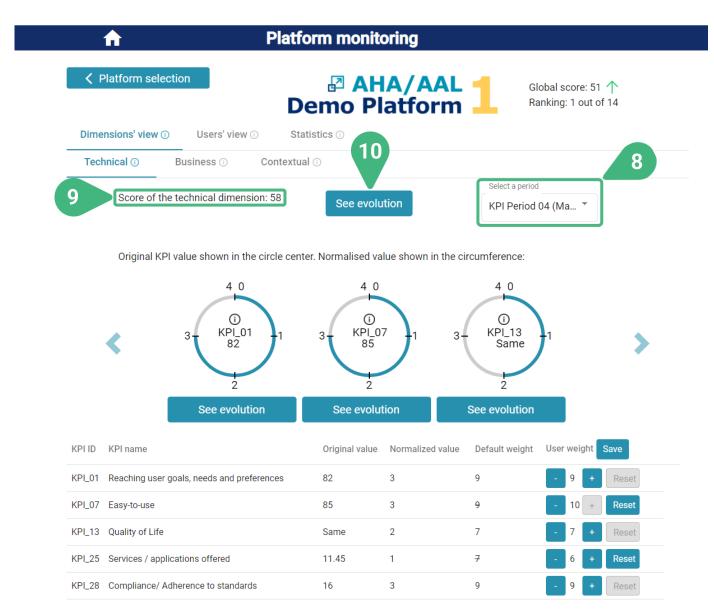
- 1) After selecting Platform monitoring, the user can view the list of the available platforms.
- When the user selects one of the available platforms, then the platform monitoring screen for the selected platform is loaded, so that the user can visualise the monitoring information about this platform.
- When clicking the home icon, then the user is always navigated back to the main screen of the tool (Home).



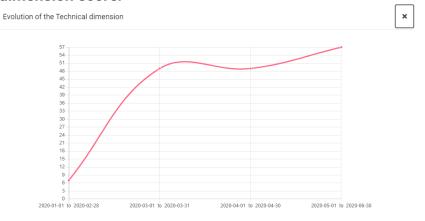
- 1) The is the logo of the currently selected platform. All the data displayed in the screen regard this platform.
- 2) The user can go back to the < **Platform selection** screen.
- An (i) icon can be found next to the various tool capabilities as they appear on the screen. These icons serve as an interactive usage-guide while the user is using the tool. When the user moves the mouse on top of one of these icons, the user can see a pop-up message with more information about the functionality.
- tendency. The global score of each platform is calculated based on all of the KPIs the values of which are available for a particular measurement period (the latest one, in this case), and their default weights (as defined in the PU methodology). As is the case with all scores, the global score is normalized in the integer range [0..100]. A larger score is better. The tendency is shown by an upward (for improvement) or downward (for deterioration) pointing arrow or an "=" sign (for no change). The tendency always reflects the change of a particular score compared to the previous KPI measurement period (if KPI data for that period are available).



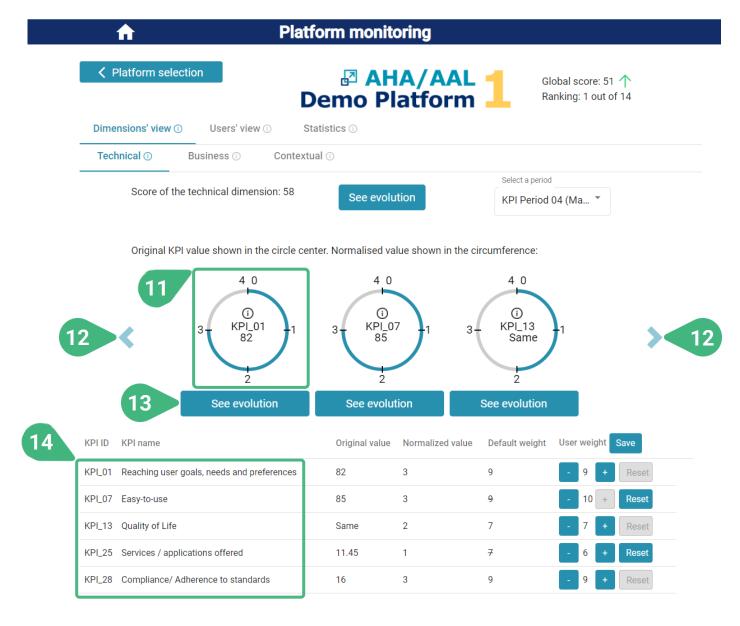
- The ranking for the latest measurement period. The ranking shows the position of the platform in comparison to the other platforms for the same type of score (the global score, in this case) and the same measurement period (the latest measurement period, in this case). The platform with the best score is placed in the 1st place. If two platforms have the same score, then they share the same place.
- There are three tabs to choose: **Dimension's view**, which is selected by default,, **Users' view** and **Statistics**. According to the PU methodology, each of the KPIs have been assigned a particular dimension and a particular user cluster. The user can group the KPIs based on these aspects. All three tabs are clickable and, depending on the selected one, the corresponding sub-tabs will be shown.
- 7) Sub-tabs of chosen view. In the case of Dimension's view available dimensions are Technical (which is selected by default), Business and Contextual. In the case of Users' view available user clusters are Primary end-users (which is selected by default), Secondary end-users, AHA/AAL solutions developer/providers & Open platform providers and Authorities & facilitators.



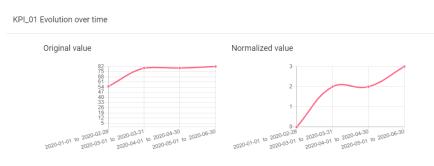
- Select a measurement period. The latest measurement period for KPIs is shown by default. The period must have been previously made available by the administrator (more info for administrators can be found in the platform data management scenario). The KPI values for each platform are stored in the tool for various measurement periods.
- 9) Score of the technical dimension. The score depends on selected tab, (in the example shown Technical dimension) and the user-set KPI weights (more information provided below).
- 10) See evolution of the score. This shows how the score evolved over time in the various measurement periods. Example Evolution of the Technical dimension score:



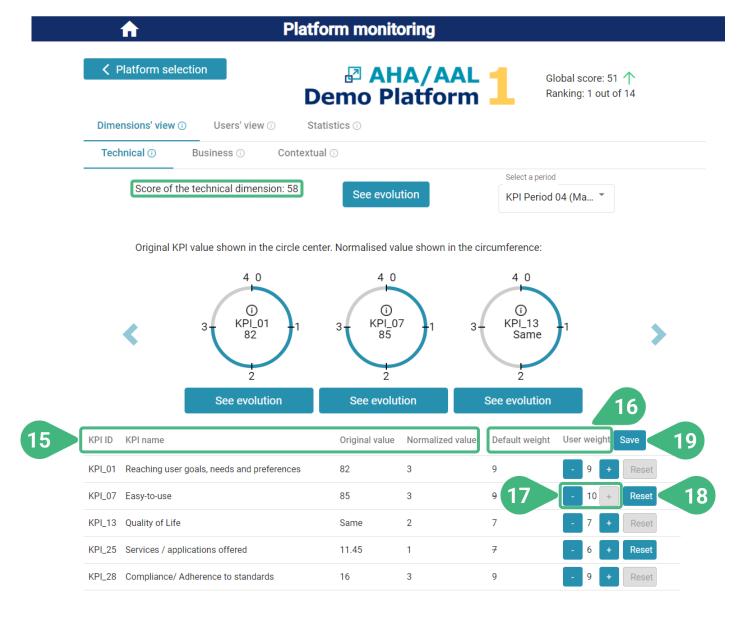
Accessible to user roles platform provider, regular user and administrator



- 11) KPI visualization circle. The user can view the KPI id and its current value. Via the (i) icon in the middle of the circle the user can further see more detailed information about the KPI. The circle visualizes the normalized value of the KPI. A different normalization approach can be followed for each of the KPIs, but they are all normalized in the integer range [0..4].
- 12) The < left and > right arrows can be used to shuffle through the circular KPI visualisations.
- 13) See evolution of KPI. The evolution of original and normalized values of a KPI (or statistics metric) as they have been recorded over the different measurement periods. Example KPI_01 Evolution over time:



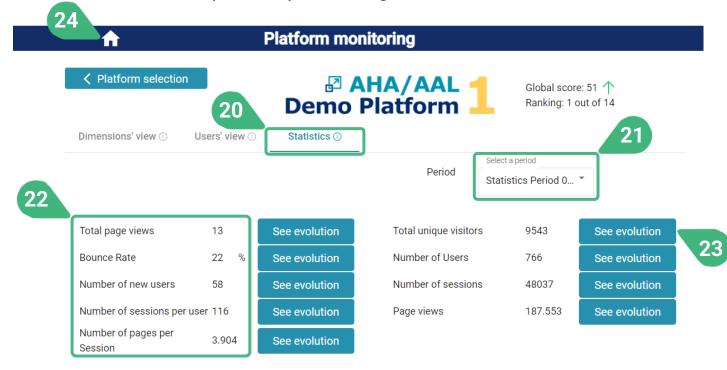
14) List of KPIs. This list presents a detailed view of KPIs.



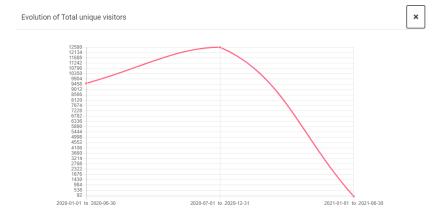
- By clicking on the title of a parameter, the user can sort the KPIs in the list in ascending or descending order based on the value of the selected parameter.
- 16) View of KPI's Default weight and User weight (as set by the user). The platform scores are calculated by taking into account the normalized KPI values and their weights. Default weights in the range [0..10] have been set for each of the KPIs in the PU methodology. Each user can personally modify the weight of each KPI, if he/she desires to. If user-set weights have been defined, they are used in place of the default ones for the calculation of the platform scores based on the user's preferences/priorities.
- 17) Change the user-set weight of a particular KPI (only registered users). The user can change the weight of each KPI individually in the range [0..10] by using the + and buttons.
- 18) The user can click on the **Reset** button, next to a KPI weight, to revert it to its default value.
- 19) The user can click on Save in order to store the desired user-set weights (only registered users). When this is done the scores within the selected subtab are re-calculated based on the user-set weight) in the shown case score of the technical dimension.

PLATFORM MONITORING | Statistics tab

Accessible to user roles platform provider, regular user and administrator

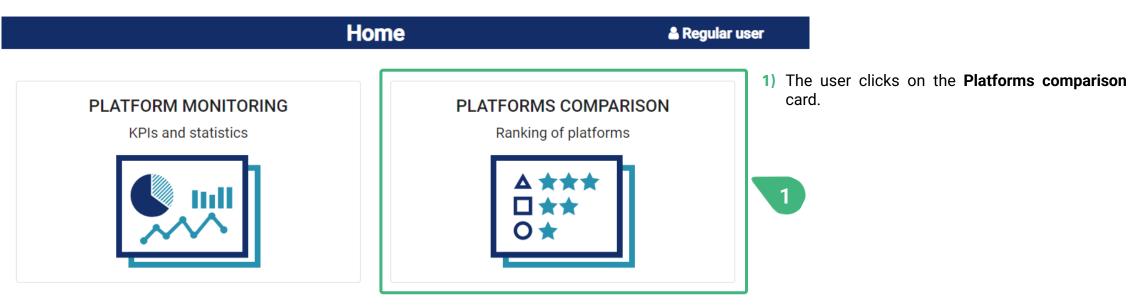


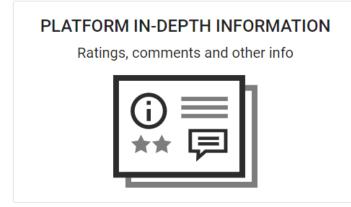
- **20) Statistics**. This is the view shown once the user selects the statistics tab.
- 21) Select a period of measurement. The tool supports different measurement periods for statistics and KPI metrics.
- 22) View statistic items list with their values.
- 23) See evolution of a statistics item. Example Evolution of Total unique visitors' metric:

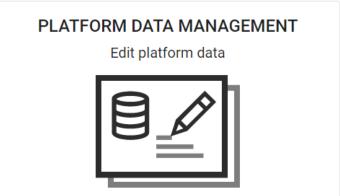


24) Go back to main screen to choose another functionality.

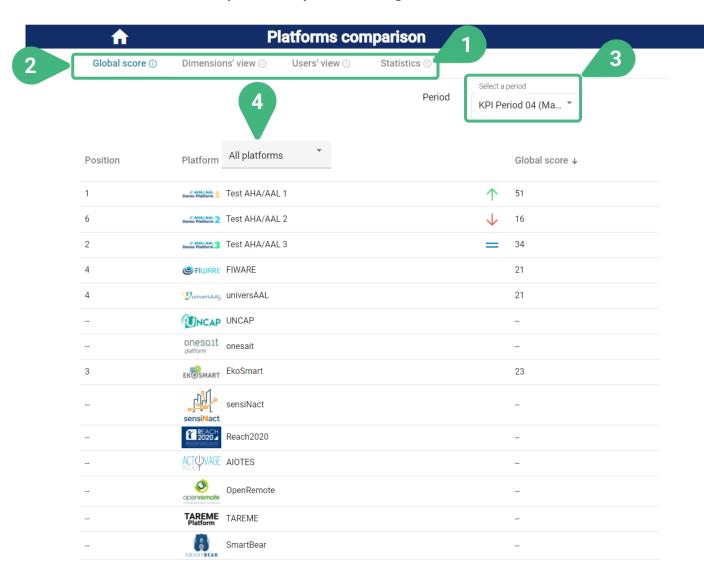
PLATFORMS COMPARISON





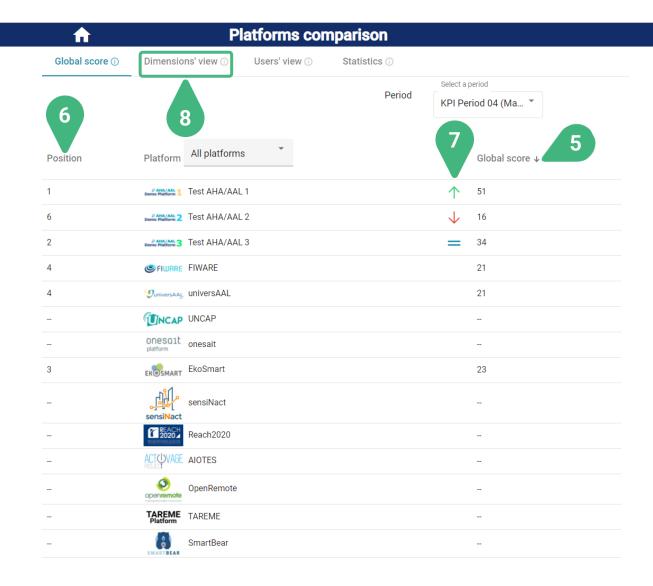


PLATFORMS COMPARISON | Global score



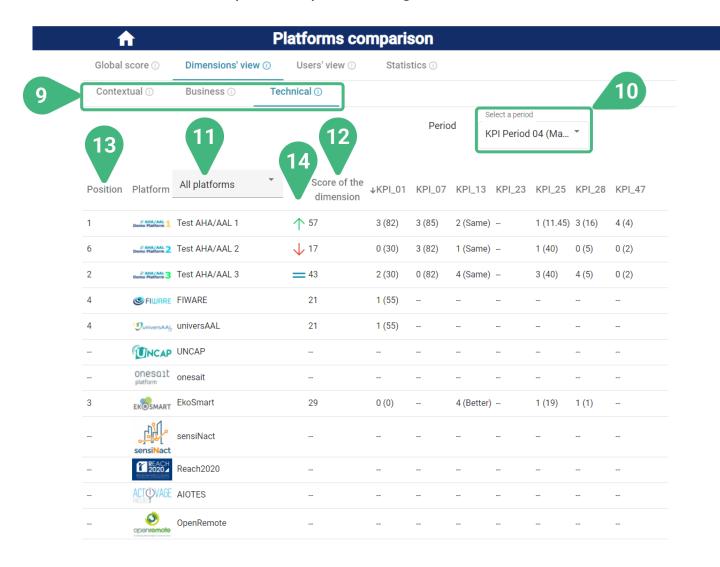
- An (i) icon can be found next to the various tool capabilities as they appear on the screen. These icons serves as an interactive usage-guide while the user is using the tool. When the user moves the mouse on top of one of these icons, then the user can see a pop-up message with more information about the functionality.
- There are four tabs to choose: Global score, which is selected by default, Dimension's view, Users' view and Statistics.
- Select a period of measurement. The most recent measurement period for KPIs is shown by default. The period must have been previously made available by the administrator (more info for administrators can be found in the platform data management scenario). The KPI values for each platform are stored in the tool for various measurement periods.
- 4) Select/filter platforms for comparison. By doing so, only the selected platforms will be presented in the list below and compared. By default, all platforms are presented

PLATFORMS COMPARISON | Global score



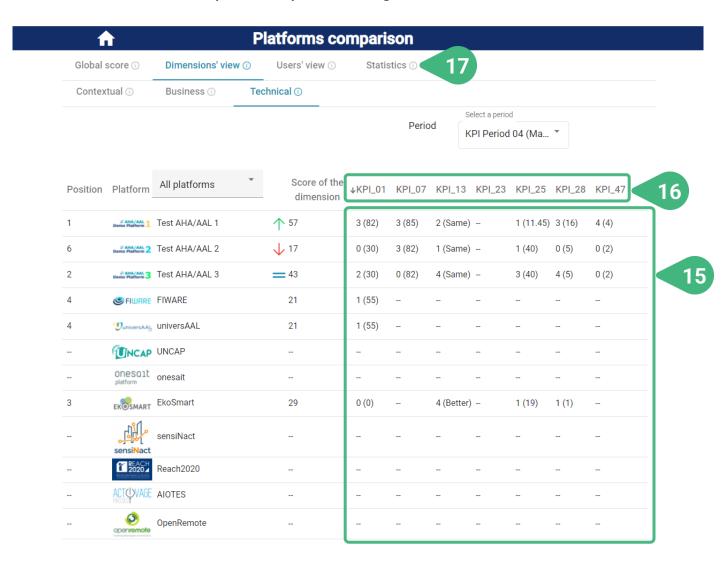
- 5) Global score (or dimensions' or clusters' score in the other tabs). The user can click on the title to order the platforms, in ascending or descending order, based on their scores.
- Position. View the ranking of platforms (based on their score).
- **7) Tendency**: View the score tendency (only if information is available).
- 8) Select **Dimensions' view**.

PLATFORMS COMPARISON | Dimentions' view



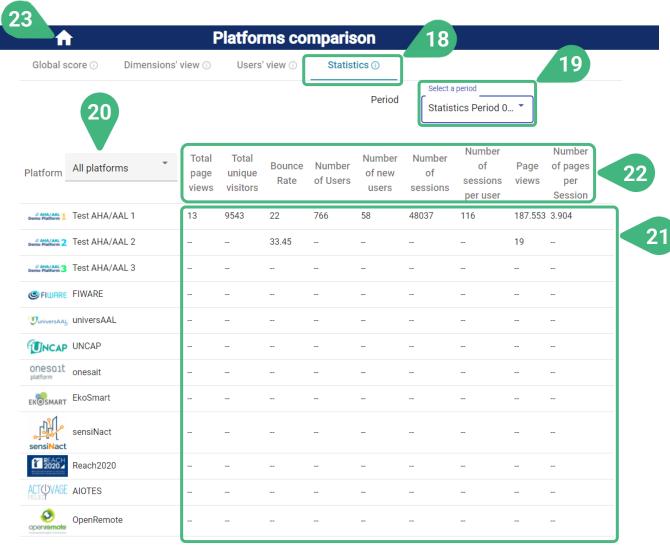
- 9) Sub-tabs of chosen view. In the case of Dimension's view available dimensions are Technical (which is selected by default), Contextual and Business. In the case of Users' view available user clusters are Primary end-users (which is selected by default), Secondary end-users, AHA/AAL solutions developer/providers & Open platform providers and Authorities & facilitators.
- 10) Select a period of measurement. Select a measurement period. The most recent measurement period is shown by default.
- 11) Select/filter platforms for comparison. By doing so, only the selected platforms will be presented in the list below and compared. By default, all platforms are presented.
- **12)** View the **Score of the dimension** (or cluster) that was selected.
- **13) Position**. View the ranking of platforms (based on their score) in this dimension.
- **14) Tendency**. View the score tendency (only if information is available).

PLATFORMS COMPARISON | Dimentions' view



- 15) View detailed information of all KPIs of this dimension including their original and normalised values. If more KPIs are available, then the user can navigate the list of KPIs and their values by using the scroll bar.
- 16) By clicking on the ID of a particular KPI, the user can sort the platforms based on their value for this specific KPI.
- Select Statistics tab.

PLATFORMS COMPARISON | Statistics tab



- 18) Statistics. This is the view shown once the user selects the statistics tab.
- 19) Select a period for statistics measurement. The tool supports different measurement periods for statistics and KPI metrics.
- 20) Select/filter platforms for comparison. By doing so, only the selected platforms will be presented in the list below and compared. By default, all platforms are presented.
- Details of the statistics metrics.
- 22) By clicking on a specific statistics metric, the user can sort the platforms based on that metric.
- Go back to main screen to choose another functionality.

PLATFORM IN-DEPTH INFORMATION

Accessible to user role platform provider and administrator



PLATFORM MONITORING

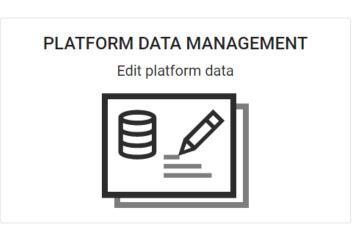
KPIs and statistics



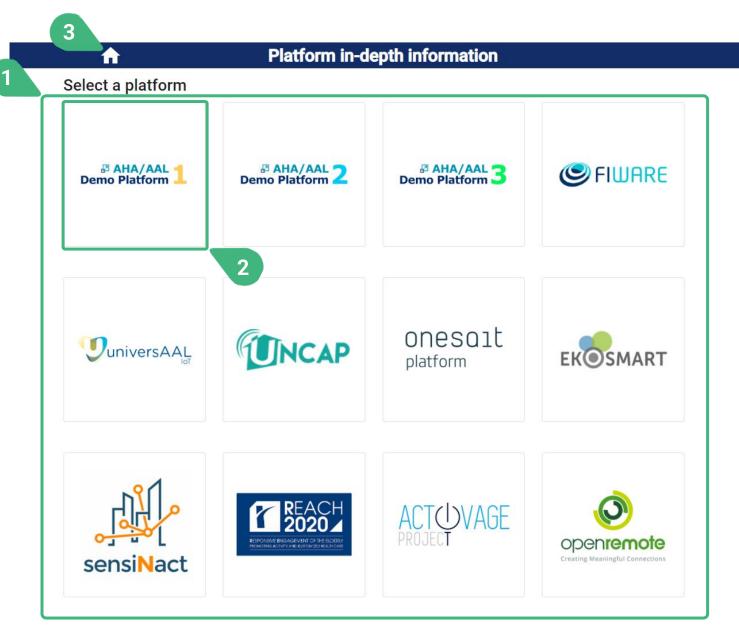


1) The user clicks on the **Platform in-depth** information card.





PLATFORM IN-DEPTH INFORMATION | Platform selection



- 1) After selecting "Platform in-depth monitoring", the user can view the list of available platforms. If the user is a platform provider only the platform(s) assigned to this particular user will be displayed and selectable in this screen. If the user is an administrator all the platforms will be displayed and selectable.
- 2) After the user selects one of the available platforms, the in-depth information about the selected platform is loaded, so that the user can visualise it.
- 3) When clicking this home icon, the user is always navigated back to the main screen of the tool (Home).

PLATFORM IN-DEPTH INFORMATION | Ratings and comments

Accessible to user role platform provider and administrator



Please rate the level of interoperability and integration easiness of the platform (including technical knowledge and overall effort requirements) with third-party platforms and services. You can also (optionally) provide a textual answer.

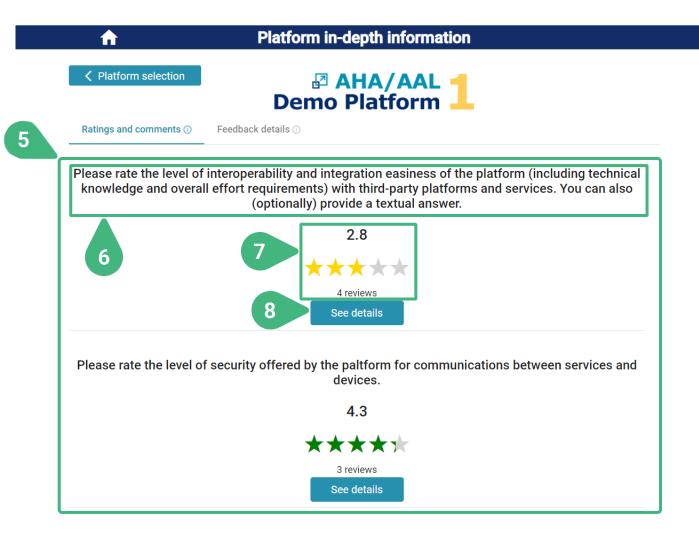


Please rate the level of security offered by the paltform for communications between services and devices.



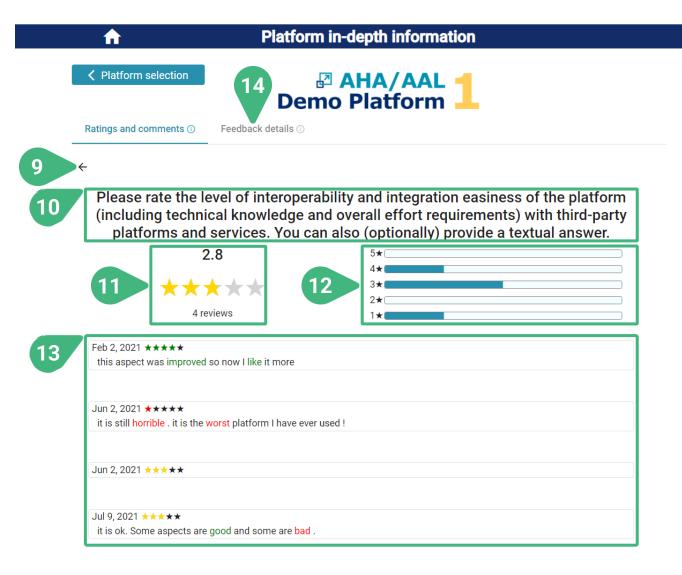
- 1) This is the logo of the currently selected platform. All the data displayed in the screen regard this platform
- The user can go back to the < Platform selection screen.
- An (i) icon can be found next to the various tool capabilities as they appear on the screen. These icons serve as an interactive usage-guide while the user is using the tool. When the user moves the mouse on top of one of these icons, the user can see a pop-up message with more information about the functionality.
- There are two tabs available Ratings and comments (which is selected by default) and Feedback details. In the tab Ratings and comments the user can visualize a cumulative analysis of the feedback provided by technology developers regarding the selected platform. This feedback was provided in the form of ratings and/or textual answers to a number of questions. Since technology developers are able to revise their feedback over time (via the tool for technology developers), only the most up-to-date ratings and answers of each developer are presented here. All developers' ratings and answers are shown in an anonymous manner.

PLATFORM IN-DEPTH INFORMATION | Ratings and comments



- List of all questions addressed to the technology developers along with a summary of the analysis of provided answers. The user can move to the next/previous questions by using the vertical scrollbar.
- Full header title of each question.
- Mean rating provided by the developers in numerical and visual (stars) form, together with the number of individual developers' ratings that the calculation of this mean value was based on.
- See details of a particular question. A new screen appears.

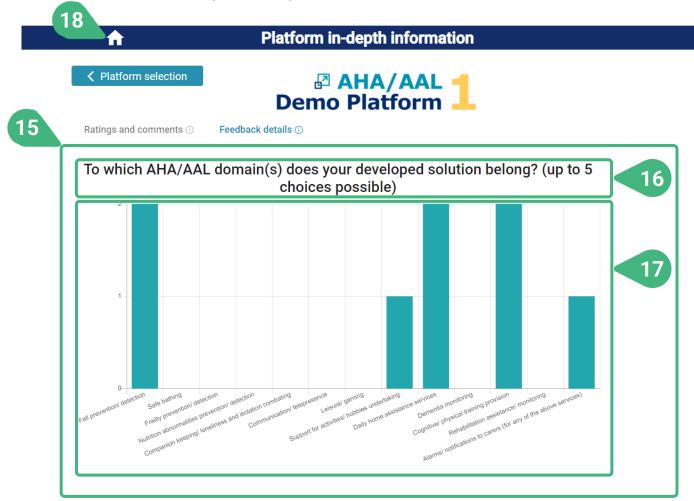
PLATFORM IN-DEPTH INFORMATION | Ratings and comments | Question detail



- Go back to the previous screen.
- 10) Title of the question.
- **11)** Mean rating and total number of developers who rated.
- **12)** Distribution of the rating scores provided by developers.
- developers, visualised in an anonymous manner.

 Only the most up-to-date rating and comment from each developer is shown. In each of the comments, various parts of the developer's text are highlighted with different colors (red or green) depending on whether they have a positive or negative meaning.
- 14) Select Feedback details tab.

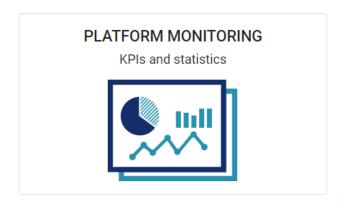
PLATFORM IN-DEPTH INFORMATION | Feedback details



- 15) In the Feedback details tab the user can view a list of questions addressed to technology developers regarding their own characteristics and the characteristics of their developed product/solution, on the basis of which the feedback regarding the selected platform was provided. All information is presented in an anonymous manner.
- 16) Title of the question.
- 17) Graph with the analysis of the distribution of the answers that developers provided to this question. The x-axis shows the available answer options. The y-axis shows the number of answers provided for each option.
- 18) Go back to main screen to choose another functionality.

Accessible to role administrator

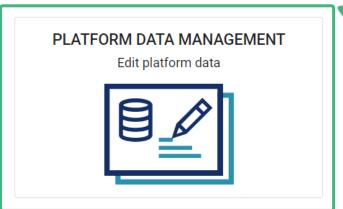




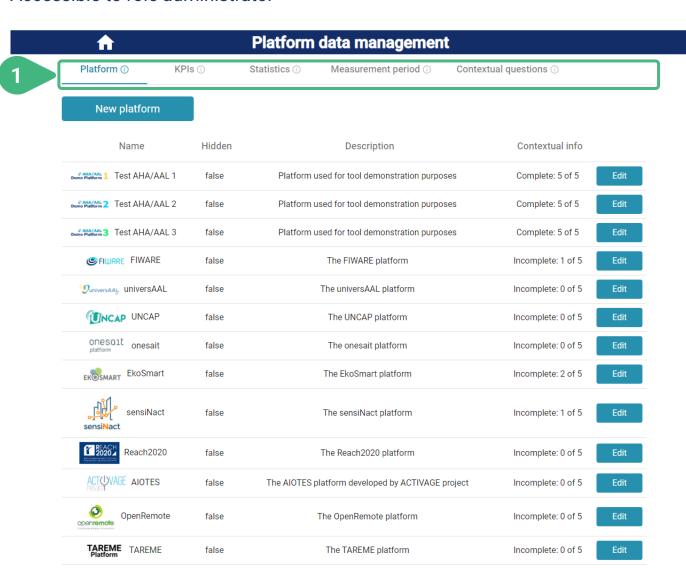


1) The administrator clicks on the **Platform data** management card.



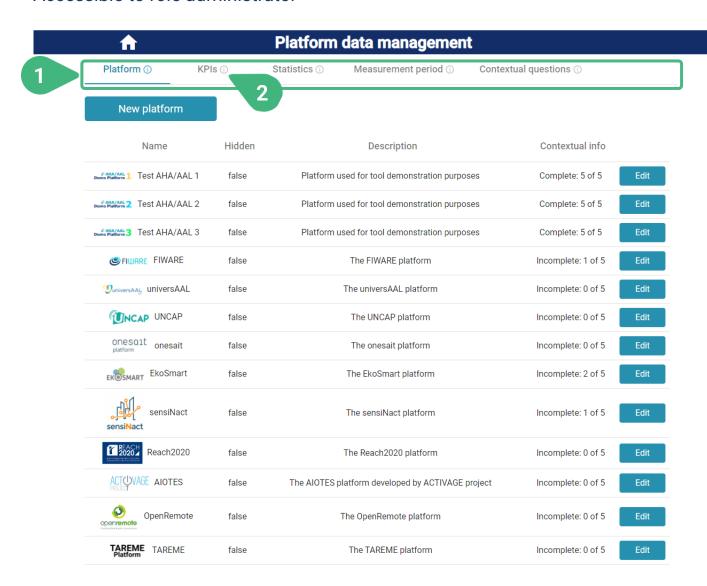


1



- 1) There are five tabs available with the following functionalities:
 - Platform, which is selected by default: View and edit the main data of the platforms, including the platform logo and answers to the contextual questions. Also introduce a new platform. Flag a platform so that it will not be usable/visible in other functionalities of the tool, yet all relevant data will be retained.
 - KPIs: View and edit the details of all KPIs, including their characteristics, default weight and normalization details. Introduce a new KPI. Input, view and edit the original KPI values for each of the platforms and each of the KPI measurement periods.
 - Statistics: View and edit the details of all statistics metrics. Introduce a new statistics metric. Input, view and edit the statistics metrics values for each of the platforms and each of the statistics measurement periods.

Accessible to role administrator

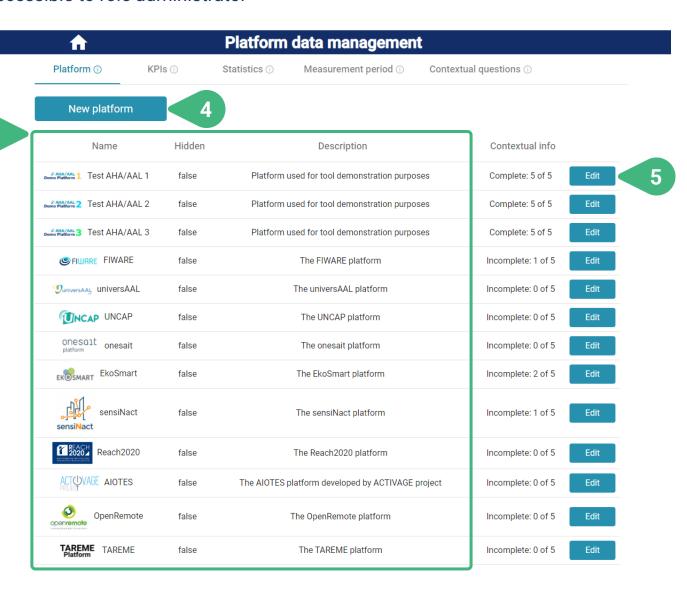


1) Continued...:

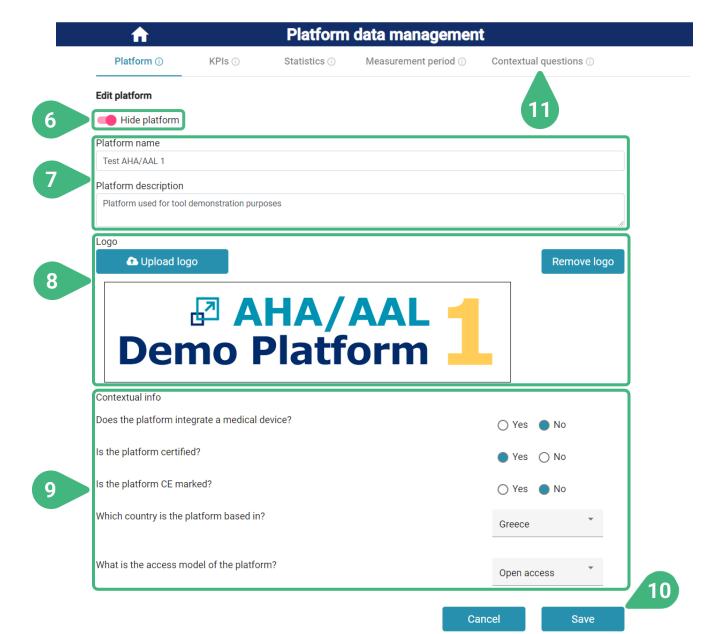
- Measurement period: View and edit the details of measurement periods of various types (e.g., KPIs, statistics). Introduce a new measurement period. The admin can further flag a measurement period so that it will not be usable/visible in all other functionalities of the tool (yet all relevant data will be retained). This is useful e.g., until all the platforms' data have been introduced in the tool for that period.
- Contextual questions: View and edit all contextual questions, their details and potential answers.
 Change the order of appearance of contextual questions and of their answers. Flag a question so that it will not be usable/visible in other functionalities of the tool, yet all relevant data will be retained. Introduce a new question.
- 2) An (i) icon can be found next to the various tool capabilities as they appear on the screen. These icons serve as an interactive usage-guide while the user is using the tool. When the user moves the mouse on top of one of these icons, the user can see a pop-up message with more information about the functionality.

Accessible to role administrator

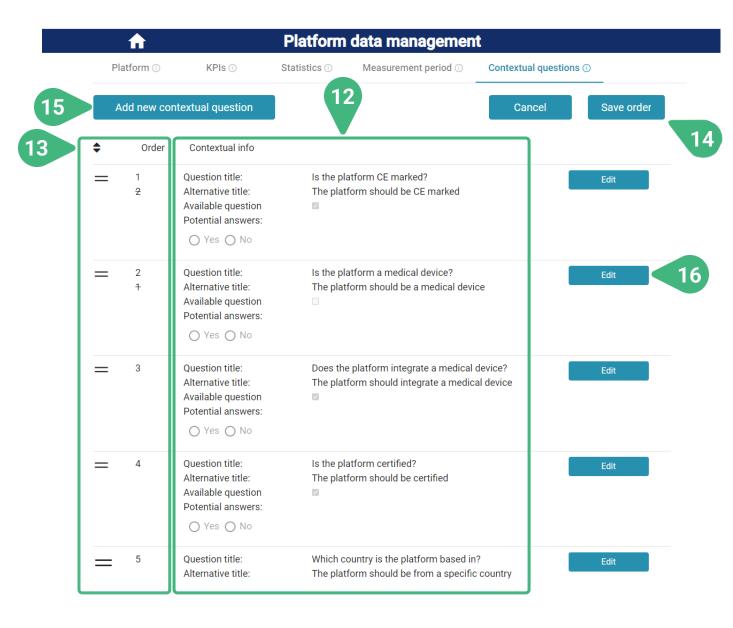
3



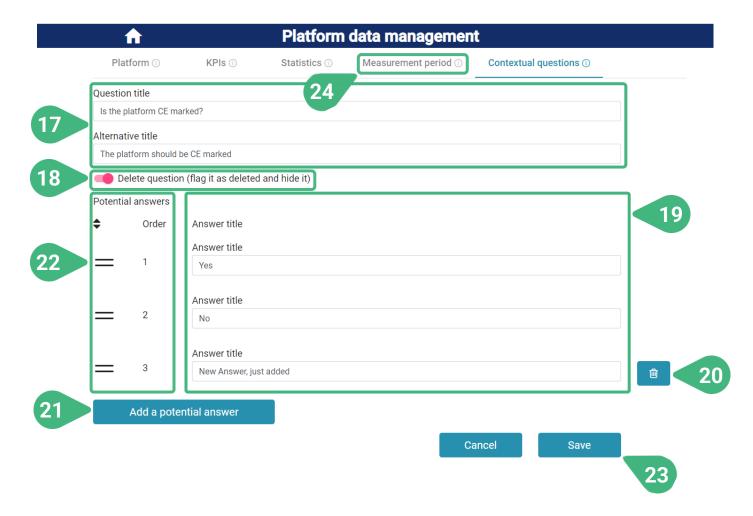
- 3) View list of existing platforms with their main details.
- 4) Introduce a **New platform**. Initially all fields are empty. A new screen appears.
- 5) **Edit** the details of an existing platform. A new screen appears. This will be shown next. This will show the same screen as when clicking 4, but with pre-filled data from the existing platform.



- Flag Hide platform so that it is hidden in other functionalities of the tool. It remains hidden until unflagged.
- 7) Edit main details of the platform, the Platform name and the Platform description.
- B) Edit the **Logo** of the platform. If a logo has already been specified for the platform, then it is shown here. The administrator can choose **Upload logo** and select an image file on their local drive. The chosen file is loaded and shown (potentially replacing the previously existing one). The administrator can also choose **Remove logo** to remove the logo of the platform.
- 9) Answer each of the Contextual info questions. The answer to each contextual question can be chosen among a list of predefined answers (as they have been specified by the administrator when editing the contextual questions).
- 10) Save data and go back to previous screen.
- 11) Select Contextual questions tab.



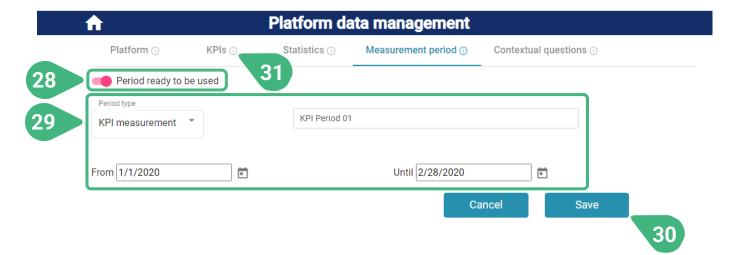
- 12) View list of existing contextual questions and their details.
- 13) Change the Order of appearance of a contextual question. By holding the = sign and moving it upwards or downwards. The order of all other questions is automatically updated. The old order is displayed in a strike-through manner.
- **14)** Save the updated order of the questions.
- **15)** Click **Add new contextual question** to introduce a new contextual question. A new screen appears.
- 16) Edit an existing contextual question. A new screen appears, where the administrator can edit/introduce the data. This will be shown next. This would be the same screen as when clicking 15, but with pre-filled data from the existing contextual question.



- 17) Edit the Question title and the Alternative title of the contextual question. The title is displayed in the platform data management part of this tool. The alternative title is used when displaying the contextual question in the tool for technology developers and using it for providing the developer with custom platform recommendations.
- 18) Flag the contextual question as invisible in order to hide it from other functionalities of the tool while retaining all relevant data. It will remain hidden until unflagged.
- 19) Edit the Answer title of existing predefined answers for the contextual question.
- **20)** Remove an existing answer from the pool of available ones.
- **21)** Add a potential answer to the pool of available ones.
- 22) Change the order of appearance of the available Potential answers. By holding the = sign and moving the answer upwards or downwards. The order of all other answers is automatically updated. The old order is displayed in a strike-through manner.
- 23) Save the updated contextual question including all changes made in this screen. Then automatically go back to the previous screen.
- 24) Select Measurement period tab.

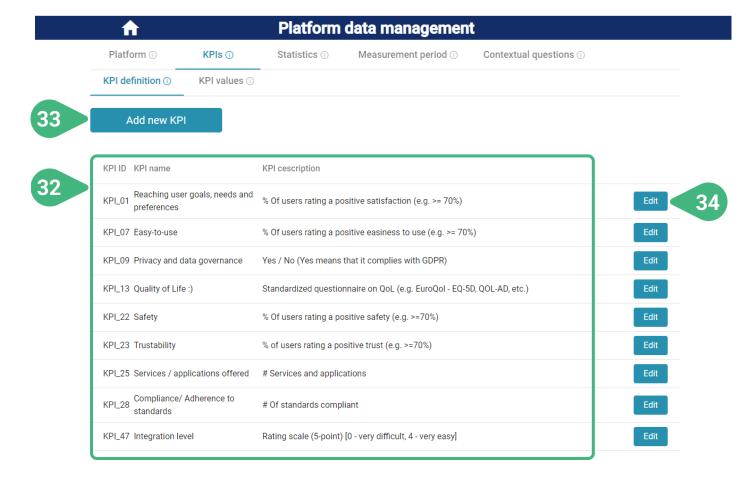
↑			Platform da	ata management				
Plati	form ①	KPIs (i)	Statistics (i)	Measurement period ①	Contextu	ual questions ()		
A	dd new perio	od						
	KPI measu	rement						
Period	title			Ready to use	From	Until		
KPI Pe	riod 01			true	01-Jan-20	28-Feb-20	Edit	
KPI Pe	riod 02			true	01-Mar-20	31-Mar-20	Edit	
KPI Pe	riod 03			true	01-Apr-20	30-Apr-20	Edit	
KPI Pe	riod 04			true	01-May-20	30-Jun-20	Edit	
KPI Pe	riod 05			false	01-Jul-21	29-Sep-21	Edit	
	Statistics n	neasurement						
Period	title			Ready to use	From	Until		
Statist	ics Period 01			true	01-Jan-20	30-Jun-20	Edit	
Statist	ics Period 02			true	01-Jul-20	31-Dec-20	Edit	
Statist	ics Period 03			true	01-Jan-21	30-Jun-21	Edit	
Statist	ics Period 04			false	01-Jul-21	31-Dec-21	Edit	

- 25) View list of existing measurement periods and their details. The periods are automatically grouped per period type. There are different measurement periods supported and used in the tool for keeping the values of different metrics for the platforms over time (e.g., KPIs, statistics).
- **26)** Click **Add a new period** to introduce a new measurement period. A new screen appears.
- 27) Edit an existing measurement period. A new screen appears. This will be shown next. This would be the same screen as when clicking 26, but with pre-filled data from the existing measurement period.



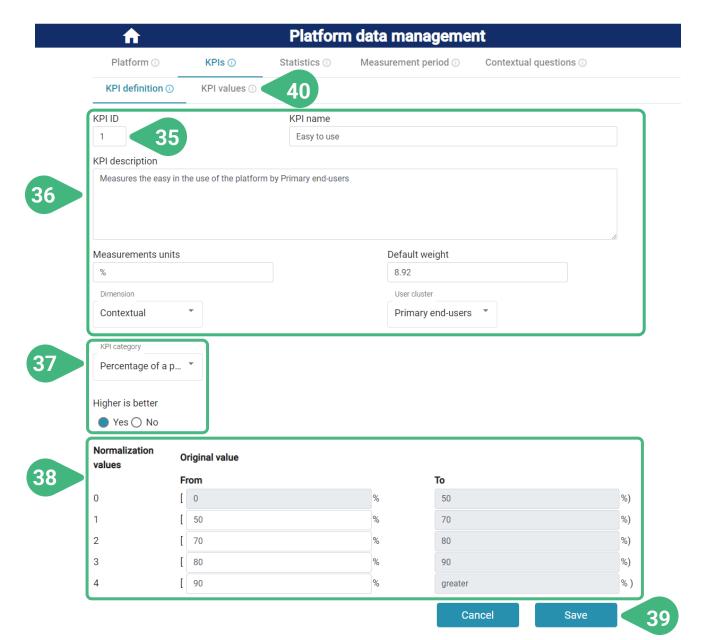
- 28) When the **Period is ready to be used** (e.g., once data entry for the various platforms has been finished for this period), then flag it so that the period and relevant data can be shown/used in other functionalities of the tool (outside of the data management functionality).
- 29) Select the **Period type**, enter period title, enter starting and ending date of period.
- **30)** Save the data.
- 31) Select the **KPIs** tab.

Accessible to role administrator



In this view, the **KPI definition** sub-tab is loaded by default. The functionality of this tab pertains to the definition of a KPI metric. After the KPI has been defined, the associated data values for each of the platforms over particular periods of time can be stored in the tool by means of the **KPI values** sub-tab.

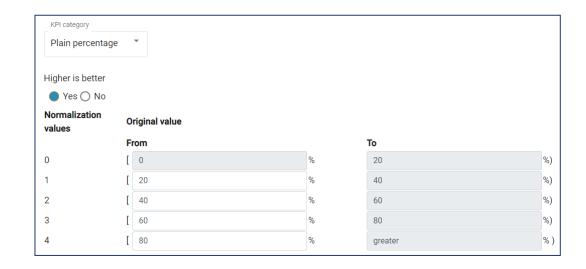
- 32) View list of KPIs and their descriptions.
- 33) The admin can click Add a new KPI and in order to introduce a new KPI metric and input its details. A new screen appears.
- 34) The admin can click **Edit** the details of an existing KPI definition. A new screen appears. This will be shown next. This would be the same screen as when clicking 33, but with pre-filled data from the existing KPI metric



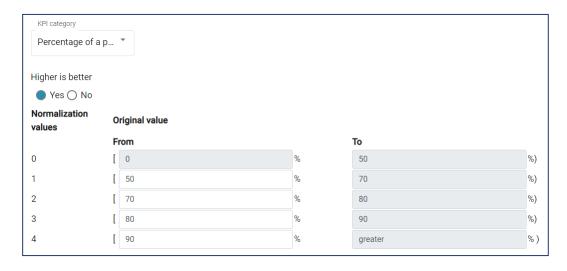
- Edit **KPI ID**. The KPI ID cannot be edited in case of an existing KPI, but must be inserted manually in case of a new KPI, since it should directly correspond to a specific KPI in the PlatformUptake.eu methodology or an updated methodology to be potentially used in the future.
- 36) The administrator can edit the KPI name, the KPI description, its Measurements units and Default weight and choose from a list the Dimension and User cluster that the KPI belongs to.
- 37) The administrator can further select the KPI category. Depending on the category selected, the admin will be further able to select if "higher is better" for the particular KPI.
- 38) Once the KPI category has been selected (or if already selected for an existing KPI) the administrator can further view/provide the details of the normalization approach of this KPI. The next slide shows more options of the KPI Normalization approach depending on the KPI category selected.
- 39) Save data and go back to previous screen.
- 40) Select KPI Values sub-tab.

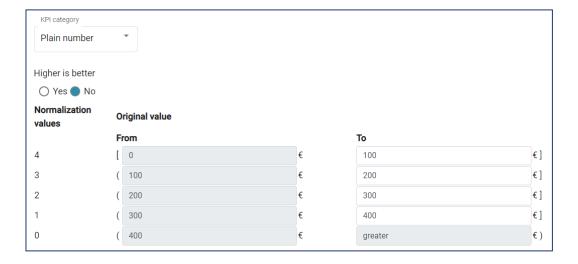
PLATFORM DATA MANAGEMENT | KPI normalisation approach

Accessible to role administrator



Via the definition of the KPI normalization approach the administrator can specify the mappings between the original KPI values (or value ranges) and each of the predefined normalized values (i.e., integers in the range [0..4]). The normalization details needed (and the way that they are provided in the tool) depend on the category of the KPI (e.g., if the KPI is quantitative or qualitative) and other KPI characteristics (e.g., if higher-is-better is true or false). In case of qualitative KPIs the user can specify each of the expected original KPI values and their mapping to the normalised ones. Some examples for different categories of quantitative KPIs and higher-is-better values can be seen here.





PLATFORM DATA MANAGEMENT | KPI normalisation approach

Accessible to role administrator

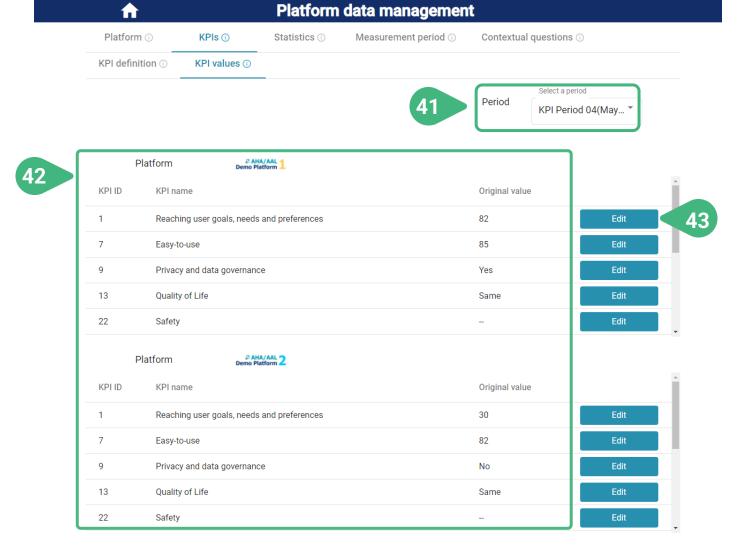




Further examples for different categories of **qualitative KPIs** can be seen here. Higher-is-better is not relevant in these cases.

In case that the KPI category is **Qualitative comparison**, the administrator can individually define a number of different expected values (original values) and specify how each one of them should be normalised in the range [0.. 4]. The administrator can remove any of these values by clicking on the **recycle bin** icon or add new ones by clicking on the **+** icon.

Accessible to role administrator

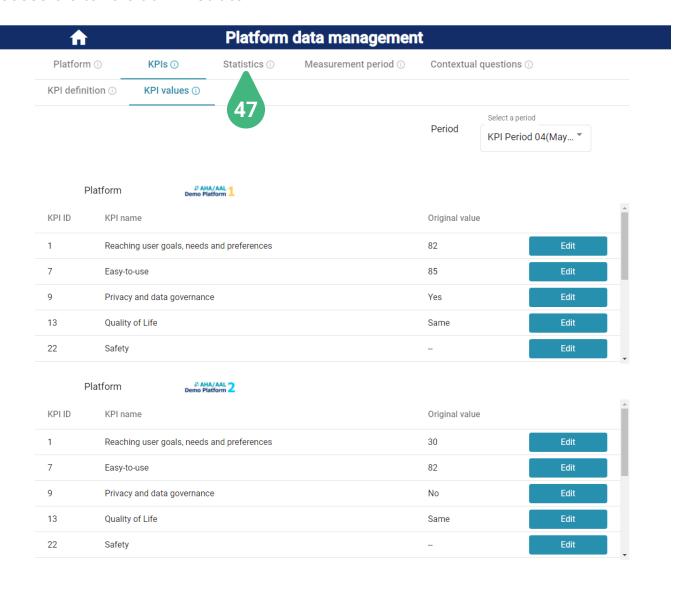


The functionality of this tab pertains to the storage of the values for the KPI metrics that have already been defined.

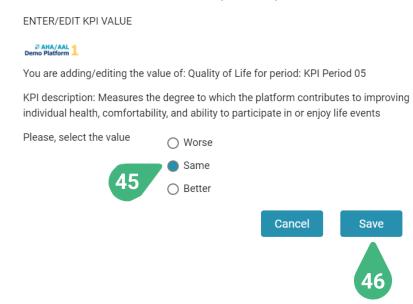
- **41) Select a period** of measurement for KPIs (the latest period is selected by default).
- **42)** View the KPI values for all platforms (for the selected measurement period).
- **43) Edit** the original value of a particular KPI for a specific platform (for the selected measurement period). A pop-up screen appears.
- **44)** In case of a **quantitative KPI** the user can **input** its numerical value.

ENTER/EDIT KPI VALUE					
& AHA/AAL 1 Demo Platform					
You are adding/editing the value of: Costs for period: KPI Period 05					
KPI description: How much, and if, the Primary end-user pays to use the platform					
Please, insert the value:	value		€		
44	Car	icel	Save		

Accessible to role administrator

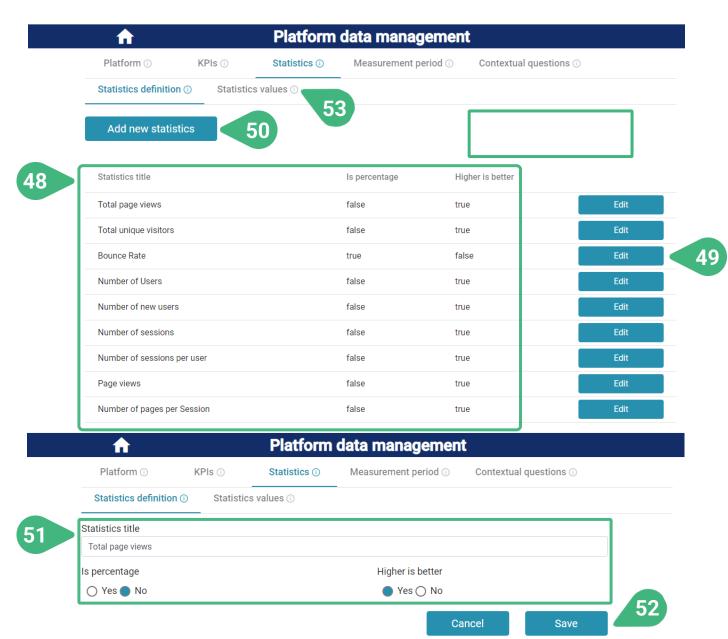


45) In case of a **qualitative KPI** the user can **select** its value from the pool of possible ones.



- 46) Save the original value and go back to previous screen. The original value is automatically normalised according to the latest normalisation details defined for this KPI.
- 47) Select Statistics tab.

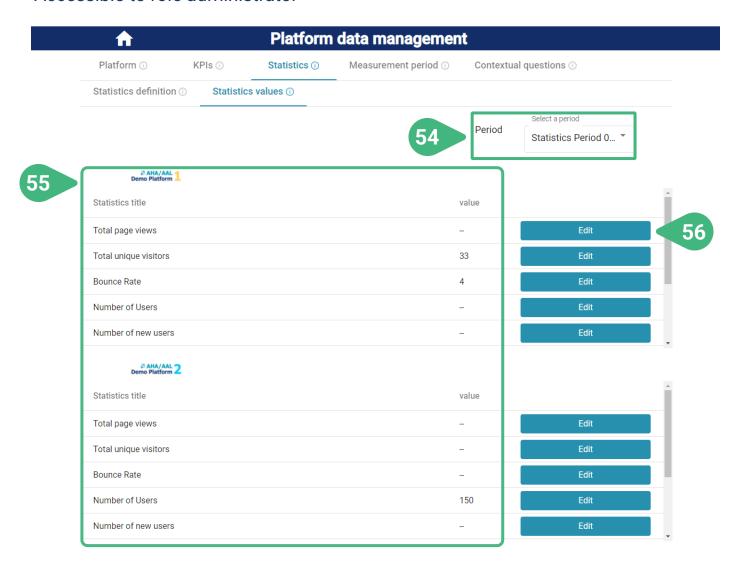
Accessible to role administrator



In the **Statistics** tab the **Statistics definition** sub-tab is loaded by default. The functionality of this tab pertains to the definition of a statistics metric. After the statistics metric has been defined, the associated data values for each of the platforms over particular periods of time can be stored in the tool by means of the **Statistics values** sub-tab.

- 48) View list of statistics metrics and their characteristics.
- 19) The administrator can Edit the details of an existing Statistics metric definition. A new screen opens. See image below.
- 50) The administrator can also click Add new statistics metric and introduce its details. A new screen opens, but in this case all fields are initially empty. See image below.
- 51) Edit (or introduce) the Statistics title and characteristics, like the Is percentage and Higher is better Boolean fields of an already existing or new statistics metric.
- **Save** the edited data and go back to previous screen. See image above.
- Select Statistics values sub-tab.

Accessible to role administrator



In the **Statistics** tab, the functionality of the **Statistics values** sub-tab pertains to the storage of the values for the statistics metrics that have already been defined.

- **Select a period** of measurement for the statistics. The latest period is selected by default.
- 55) View the statistics values of all platforms for the selected measurement period.
- 56) Edit the value of a particular statistics metric of a specific platform for the selected measurement period. A new screen opens:

			58
57		Cancel	Save
Please, insert the value:	33		
You are adding/editing the value o	f: Total unique vis	itors for period	: Statistics Period 03
& AHA/AAL 1 Demo Platform 1			
Edit/add statistic value			

- **57)** Edit or insert the value of the Statistics metric.
- **Save** the value and go back to previous screen..



Tool for technology developers

Efstathios Karanastasis

Institute of Communication and Computer Systems, Greece



















This project has received funding from the European Union's Horizon 2020 Research and Innovation Action under Grant Agreement No 875452.



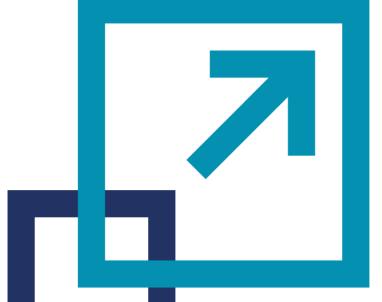












Tool for technology developers | Usage scenarios

Main screen - Home

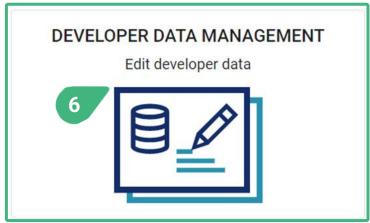
Home

Administrator









- 1) The role of the user currently active determines whether the user has access to functionalities/usage scenarios or not.
- 2) The main screen (Home) of the tool includes four cards, one for each of the main functionalities of the tool.
- 3) Platforms comparison: Compare among platforms from different perspectives, including technical and financial ones.
- **4) Platforms recommendation:** Be presented with tailored platform recommendations based on the user's expectations and priorities.
- 5) **Developer's self-assessment**: Provide feedback regarding aspects of the platforms, assess the evolution of their own developments over time and view an analysis of the cumulated feedback provided by other developers using the platforms.
- **6) Developer data management:** Management of the platform data.

The cards that are accessible to the logged in user (depending on the role) are shown with a blue and turquoise colored icon. By clicking on any of these cards the user gets access to the selected functionality of the tool. In the case of the shown user role (Administrator), all available functionalities of the tool are accessible to this user

Tool for technology developers | Usage scenarios

Main screen - Home







Tailored recommendation of platforms



- 1) This is the case of a "Technology developer".
- 2) If the stored permissions do not allow the user to access one of the functionalities, then the relevant card that is unavailable to this user role is shown with a black and grey colored icon.
- 3) When clicking on any of these unavailable cards, an appropriate message will be presented to the user.

DEVELOPER'S SELF ASSESSMENT

Developer feedback



Not available

Please login with an authorised user account to access this functionality

PLATFORMS COMPARISON

Accessible to user roles technology developer and administrator







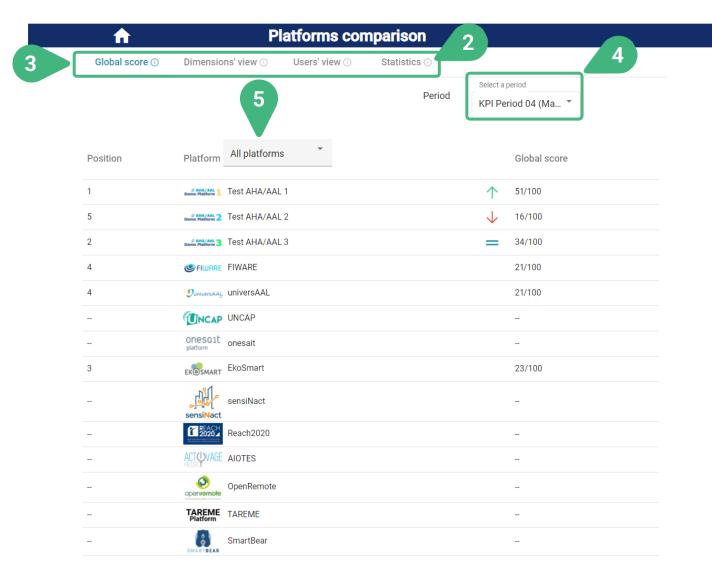
1) The user clicks on the **Platforms comparison** card and a new screen appears showing the relevant functionality.





PLATFORMS COMPARISON | Global score (I)

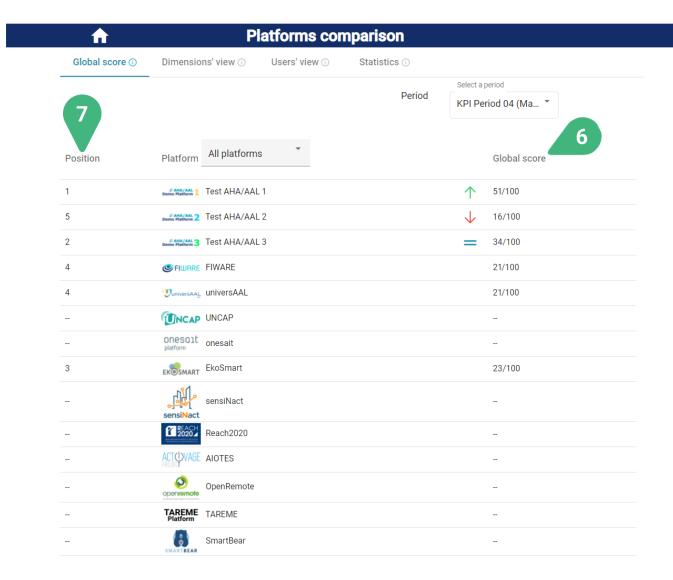
Accessible to user roles technology developer and administrator



- 2) An (i) icon can be found next to the various tool capabilities as they appear on the screen. These icons serves as an interactive usage-guide while the user is using the tool. When the user moves the mouse on top of one of these icons, then the user can see a pop-up message with more information about the functionality.
- 3) There are four tabs to choose: Global score, which is selected by default, Dimension's view, Users' view and Statistics.
- 4) Select a period of measurement. The most recent measurement period for KPIs is shown by default. The period must have been previously made available by the administrator. The KPI values for each platform are stored in the tool for various measurement periods.
- Select/filter platforms for comparison. By doing so, only the selected platforms will be presented in the list below and compared. By default, all platforms are presented. When changing the selection of platforms, then the ranking positions (see next slide) are automatically updated accordingly.

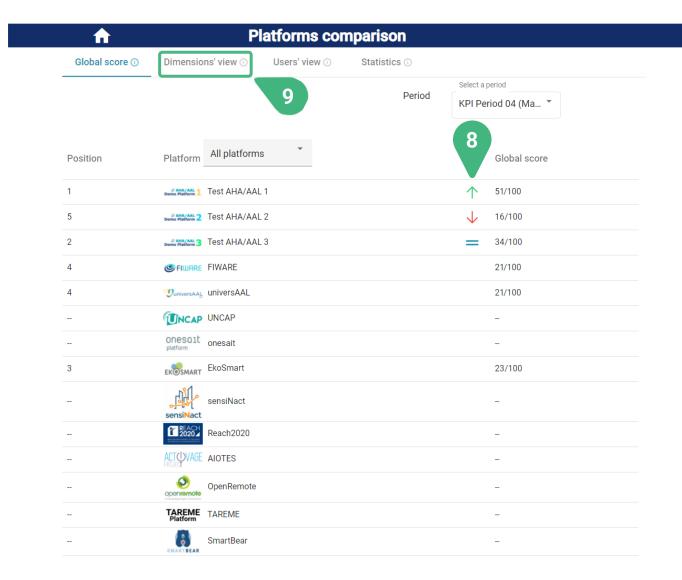
PLATFORMS COMPARISON | Global score (II)

Accessible to user roles technology developer and administrator



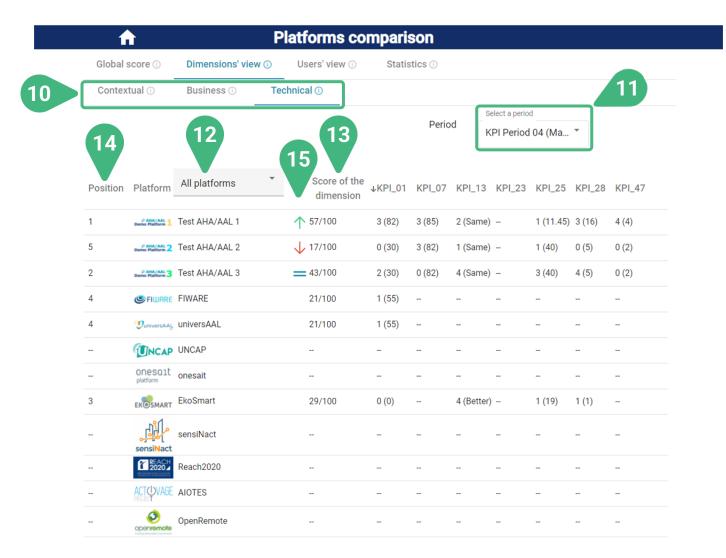
- Global score (or dimensions' or clusters' scores in the other tabs). The user can click on the label to order the platforms, in ascending or descending order, based on their scores. The global score of each platform is calculated based on all the KPIs, the values of which are available for a particular measurement period, and their default weights. As it is the case with all scores, the global score is normalized in the integer range [0..100]. A larger score is better.
- 7) Position. View the ranking of platforms (based on their score). The user can click on the label to order the platforms in the list, in ascending or descending order, based on their raking position. The ranking position of each platform is calculated based on the score (the Global score, in this case) of all platforms currently shown in the list. The platform with the best score is placed in the 1st place. If two platforms have the same score, then they share the same place.

PLATFORMS COMPARISON | Global score (III)



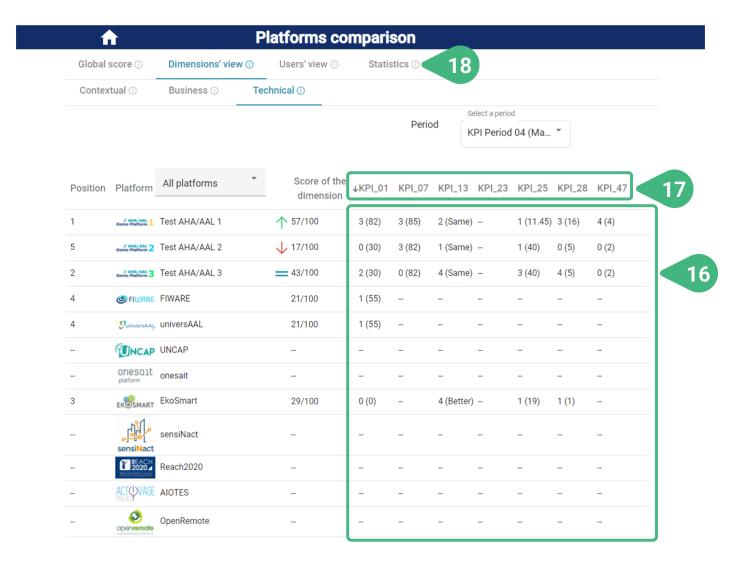
- 8) **Tendency**. View the score tendency. The tendency reflects the change of a particular score compared to the previous KPI measurement period (if KPI data for that period are available and the score can be calculated) and is shown by an upward (for improvement) or downward (for deterioration) pointing arrow or an "=" sign (for no change).
- 9) Select Dimensions' view.

PLATFORMS COMPARISON | Dimentions' view (I)



- 10) Sub-tabs of chosen view. In the case of Dimension's view available dimensions are Technical (which is selected by default), Contextual and Business. In the case of Users' view available user clusters are Primary end-users (which is selected by default), Secondary end-users, AHA/AAL solutions developer/providers & Open platform providers and Authorities & facilitators.
- **11) Select a period** of measurement. The most recent measurement period is shown by default.
- 12) Select/filter platforms for comparison. By doing so, only the selected platforms will be presented in the list below and compared. By default, all platforms are presented. The ranking positions are automatically updated accordingly.
- 13) View the **Score of the dimension** (or cluster in the other tabs) that was selected. The user can click on the label to order the platforms based on their score.
- **14) Position**. View the ranking of platforms (based on their score) in this dimension. The user can click on the label to order the platforms based on their ranking position.
- **15) Tendency**. View the score tendency (only if information is available).

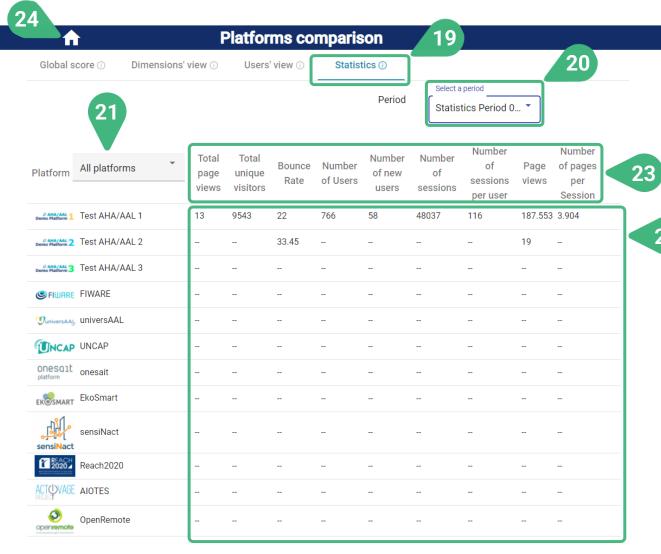
PLATFORMS COMPARISON | Dimentions' view (II)



- View detailed information of all KPIs of this dimension, in this case the technical dimension, including their original and normalised values. If more KPIs are available, then the user can navigate the list of KPIs and their values by using the scroll bar.
- 17) By clicking on the ID label of a particular KPI, the user can sort the platforms, in ascending or descending order, based on their value for this specific KPI.
- 8) Select **Statistics** tab.

PLATFORMS COMPARISON | Statistics tab

Accessible to user roles technology developer and administrator



- 19) Statistics. This is the view shown once the user selects the statistics tab.
- **20) Select a period** for statistics measurement. The tool supports different measurement periods for statistics and KPI metrics.
- 21) Select/filter platforms for comparison. By doing so, only the selected platforms will be presented in the list below and compared. By default, all platforms are presented.
- Values of the statistics metrics.

22

- 23) By clicking on the label of a specific statistics metric, the user can sort the platforms, in ascending or descending order, based on that metric.
- **24)** Click on the **Home icon** to go back to the main screen and choose another functionality.

PLATFORMS RECOMMENDATION

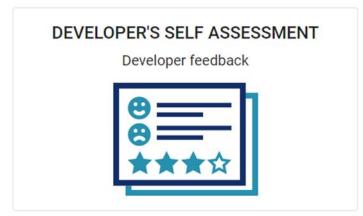
Accessible to user roles technology developer and administrator







 The Platforms recommendation functionality is performed in three steps: EXPECTATIONS, PRIORITIES and PLATFORMS. When the user clicks on the corresponding card, a new screen appears showing the first step.





PLATFORMS RECOMMENDATION | EXPECTATIONS

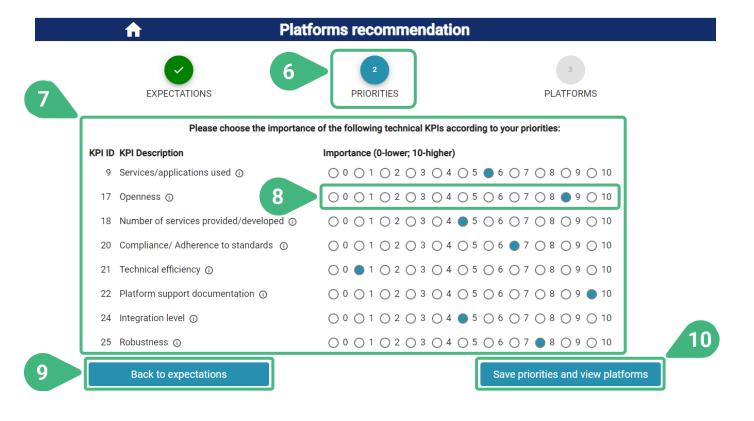
Accessible to user roles technology developer and administrator

Please let us know what you expect from a platform: (1) The platform should be CE marked All Indifferent Yes No (2) The platform should be from a specific country All Indifferent Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angola (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Australia (AU) Austria (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Randladesh (RD) Rarbados (RR) Relarus (RY) Relarium (RE) Relarus (RY) Renin (R.I) Reminda (RM) Ianzania, United Republic of (IZ) Inaliand (IH) Ilmor-Leste (IL) Iogo (IG) Iokelau (IK) Ionga (IU) Trinidad and Tobago (TT) Tunisia (TN) Turkey (TR) Turkmenistan (TM) Turks and Caicos Islands (TC) Tuvalu (TV) Uganda (UG) Ukraine (UA) United Arab Emirates (AE) United Kingdom (GB)	Please let us know what you expect from a platform: (1) The platform should be CE marked	Please let us know what you expect from a platform: (1) The platform should be CE marked All Indifferent Yes No (2) The platform should be from a specific country All Indifferent Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angola (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Australia (AU) Austria (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Rannladesh (RD) Rarbados (RR) Relarus (RV) Relarus (RF) Relize (R7) Renin (R.I) Rermuda (RM) Innor-Leste (IL) Iogo (IG) Iokeiau (IK) Ionga (IU) Trinidad and Tobago (TT) Tunisia (TN) Turkey (TR) Turkmenistan (TM) Turks and Caicos Islands (TC) Tuvalu (TV) Uganda (UG) Ukraine (UA) United Arab Emirates (AE) United Kingdom (GB) United States (US) United States Minor Outlying Islands (UM) Uruguay (UY) Uzbekistan (UZ) Vanuatu (VU) Venezuela, Bolivarian Republic of (VE) Viet Nam (VN) Virgin Islands, British (VG) Virgin Islands, U.S. (VI)	Please let us know what you expect from a platform: The platform should be CE marked All Indifferent Yes No	↑	Platforms recommendation	n
(1) The platform should be CE marked All Indifferent Yes No (2) The platform should be from a specific country All Indifferent Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angola (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Australia (AU) Austria (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Rangladesh (BD) Rarbados (BR) Relatus (BY) Relatum (BE) Relize (BZ) Renin (BL) Reminda (RM) Indigal and Tobago (TT) Inaliand (IH) Imor-Leste (IL) Iogo (IG) Iokelau (IK) Ionga (IU) Trinidad and Tobago (TT) Tunisia (TN) Turkey (TR) Turkmenistan (TM) Turks and Caicos Islands (TC) Tuvalu (TV) Uganda (UG) Ukraine (UA) United Arab Emirates (AE) United Kingdom (GB)	(1) The platform should be CE marked All Indifferent Yes No (2) The platform should be from a specific country All Indifferent Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angola (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Australia (AU) Austria (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Randladesh (RD) Rarbados (RR) Relarus (RV) Relarum (RF) Relize (RZ) Renin (R.I) Rermuda (RM) Innor-Leste (IL) Iogo (IG) Iokelau (IK) Ionga (IU) Trinidad and Tobago (TT) Tunisia (TN) Turkey (TR) Turkmenistan (TM) Turks and Caicos Islands (TC) Tuvalu (TV) Uganda (UG) Ukraine (UA) United Arab Emirates (AE) United Kingdom (GB) United States (US) United States Minor Outlying Islands (UM) Uruguay (UY) Uzbekistan (UZ) Vanuatu (VU) Venezuela, Bolivarian Republic of (VE) Viet Nam (VN) Virgin Islands, British (VG) Virgin Islands, U.S. (VI) Wallis and Futuna (WF) Western Sahara (EH) Yemen (YE) Zambia (ZM) Zimbabwe (ZW)	(1) The platform should be CE marked All Indifferent Yes No (2) The platform should be from a specific country All Indifferent Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angola (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Australia (AU) Austria (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Rancladesh (RD) Rarhados (RR) Relarus (RV) Relarus (RV) Relarus (RF) Relarus (RF) Renin (RL) Rermuda (RM) Indiad and Tobago (TT) Tunisia (TN) Turkey (TR) Turkmenistan (TM) Turks and Caicos Islands (TC) Tuvalu (TV) Uganda (UG) Ukraine (UA) United Arab Emirates (AE) United Kingdom (GB) United States (US) United States Minor Outlying Islands (UM) Uruguay (UY) Uzbekistan (UZ) Vanuatu (VU) Venezuela, Bolivarian Republic of (VE) Viet Nam (VN) Virgin Islands, British (VG) Virgin Islands, U.S. (VI) Wallis and Futuna (WF) Western Sahara (EH) Yemen (YE) Zambia (ZM) Zimbabwe (ZW) (3) The platform should be Open Standards Based All	(1) The platform should be CE marked All Indifferent Yes No No All Indifferent Algoria (DZ) American Samoa (AS) Andorra (AD) Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angola (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Austriai (AU) Austriai (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Rangladesh (RD) Rarhados (RR) Relarus (RY) Relaium (RF) Relize (R7) Renin (R.I) Rermuda (RM) Indifferent I		PRIORITIES	PLATFORMS
Yes No No No No No No No N	Yes No No No No No No No N	Yes No No No No No No No N	Yes No No No Pelatform should be from a specific country All Indifferent Afghanistan (AF) Åland Islands (AX) Albania (AL) Algeria (DZ) American Samoa (AS) Andorra (AD) Angual (AO) Anguilla (AI) Antarctica (AQ) Antigua and Barbuda (AG) Argentina (AR) Armenia (AM) Aruba (AW) Australia (AU) Australia (AT) Azerbaijan (AZ) Bahrain (BH) Bahamas (BS) Rannladesh (RD) Rarbados (RR) Relatus (RY) Relatus (Please let us know what you expect from a platf	form:
		(3) The platform should be Open Source	(3) The platform should be Open Source All Indifferent Yes No (4) The platform should be Open Standards Based All Yes No (5) The platform should use Shared Common Information Models All Indifferent Yes No (6) The platform should be Vendor and Technology Neutral All Indifferent Yes No (7) The platform should support Open Data All Indifferent Indifferent	Yes No (2) The platform should be from a speci Afghanistan (AF) Åland Island Angola (AO) Anguilla (AI) Aruba (AW) Australia (AU) Randladesh (RD) Rarhados (R I anzania, United Republic of (IZ) Trinidad and Tobago (TT) Tun Tuvalu (TV) Uganda (UG) United States (US) United States	fic country	☐ Argentina (AR) ☐ Armenia (AM) I (BH) ☐ Bahamas (BS) IZE (R7) ☐ Renin (R.I) ☐ Rermuda (RM) GO (IG) ☐ IOKEIAU (IK) ☐ Ionga (IU) W) ☐ Turks and Caicos Islands (TC) ☐ United Kingdom (GB) V) ☐ Uzbekistan (UZ) ☐ Vanuatu (VU)
Yes No (4) The platform should be Open Standards Based □ All Yes □ No (5) The platform should use Shared Common Information Models ☑ All Indifferent Indifferent	`` '		· · · · · · · · · · · · · · · · · · ·	• •	Technology Neutral	
Yes No No	✓ Yes ✓ No (6) The platform should be Vendor and Technology Neutral □ All Indifferent	.,	☐ Yes ☐ No	(7) The platform should support Open D ☐ Yes ☐ No	ata All Indifferent	

Save answers and go to priorities

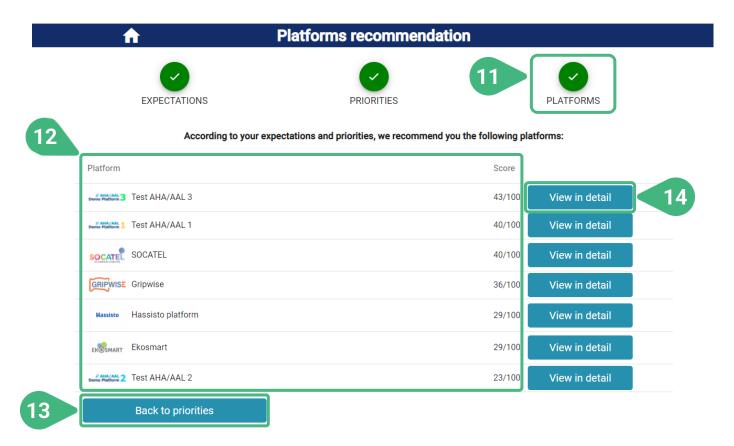
- In the first step called EXPECTATIONS, the user can provide their expectations from the platforms by answering a few questions. The pool of available platforms in the tool will be filtered so that the resulting platforms cover the user's expectations based on the user's answers.
- 3) A list of available questions appears, and the user can choose to answer as many of these questions as desired. The more questions are answered the tighter the filtering of platforms will be.
- 4) For each of the questions predefined answers appear and the user can choose as many as desired. The less answers are chosen for a question, the tighter the filtering of platforms will be. By default, none of the answers are chosen and "Indifferent" is marked to indicate that this particular question is not going to affect the filtering of available platforms. Once at least one answer is chosen by the user, "Indifferent" is unmarked and only the platforms that correspond to the selected answers are going to be considered. If all available answers are selected, then "Indifferent" is marked again, since any of the platforms could comply with this selection.
- 5) Save answers and go to priorities to continue with the second step **PRORITIES**.

PLATFORMS RECOMMENDATION | PRIORITIES



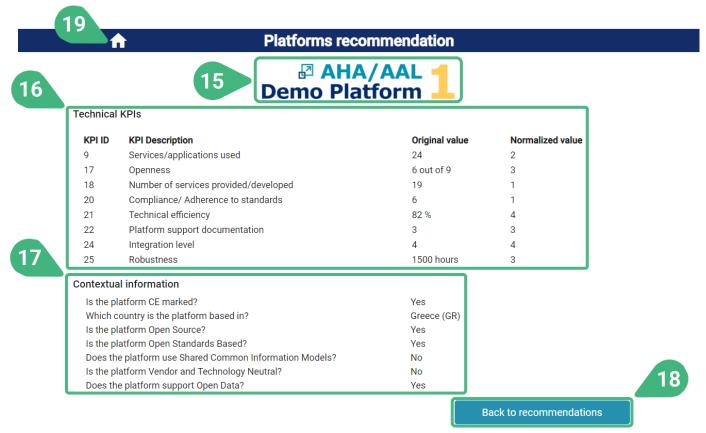
- 6) In the second step called PRIORITIES, the user can define the importance of a certain number of technical KPIs according to the user's priorities.
- 7) View a list of available KPIs of the technical dimension, the importance of which can be specified independently. Based on the specified importance, each KPI will be taken into account more or less when the scores of the platforms will be calculated.
- For each KPI, the user can select an importance from 0 (if KPI is of no importance and should not be considered for the calculation of the platform scores) to 10 (if KPI is of maximum importance for the user's needs, so it will affect more the calculated scores). The first time this second step is entered, all KPIs are shown with a default importance of 5. If the user has previously used this functionality, then the importance previously chosen and saved for each KPI will be automatically loaded. The user can still change the importance as desired.
- 9) The user can go back to previous steps to make changes by clicking on Back to expectations.
- 10) By clicking on Save priorities and view platforms, the chosen importance of all KPIs is saved, and the user continues with the third step PLATFORMS.

PLATFORMS RECOMMENDATION | PLATFORMS (I)



- 11) In the third step called **PLATFORMS**, the results of the Platforms recommendation functionality are shown.
- 12) A list of recommended Platforms that have been filtered based on the user-provided expectations and ordered by Score based on the user-set priorities is shown.
- 13) At any time, the user can go back to previous steps to make changes. In this case the user can go Back to priorities to make changes to user-set priorities.
- **14)** Click **View in detail** to view detailed information of a particular platform in this context.

PLATFORMS RECOMMENDATION | PLATFORMS (II)



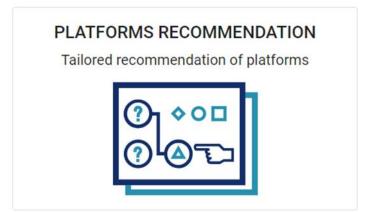
- 15) The logo of the chosen platform.
- 16) In the Technical KPIS section, the performance of the platform for each of the technical dimension KPIs, including their original and normalized values, are shown.
- 17) In the **Contextual information** section, the characteristics of the platform provided as answers to the contextual questions.
- 18) At any time, the user can go back to previous steps to make changes. In this case the user can go Back to recommendations to see the list of recommended platforms.
- **19)** Click on the **Home icon** to go back to the main screen and choose another functionality.

DEVELOPER'S SELF ASSESSMENT

Accessible to user roles technology developer and administrator





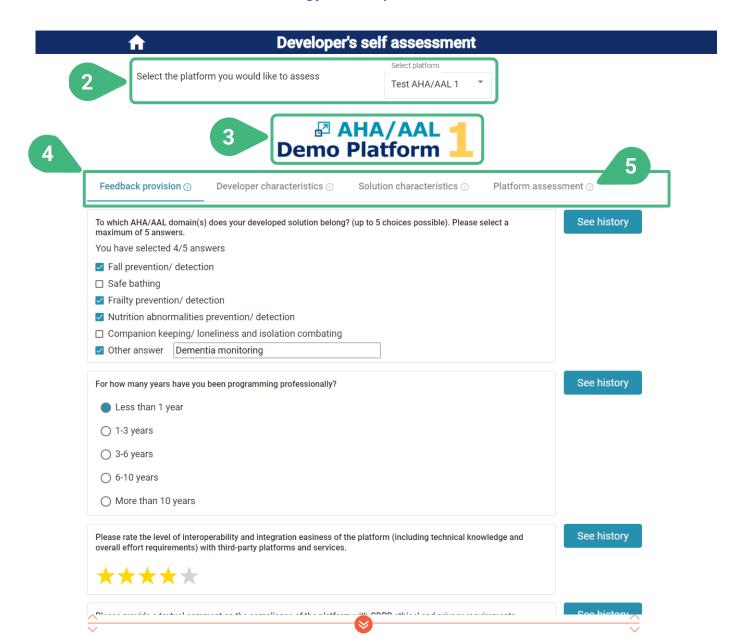


1) When the user clicks on the Developer's self assessment card, a new screen appears showing the relevant functionality.



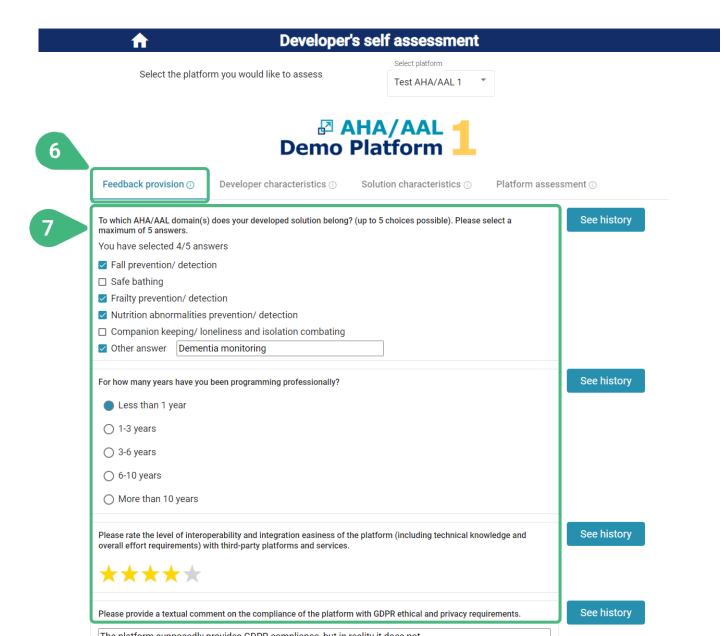


DEVELOPER'S SELF ASSESSMENT



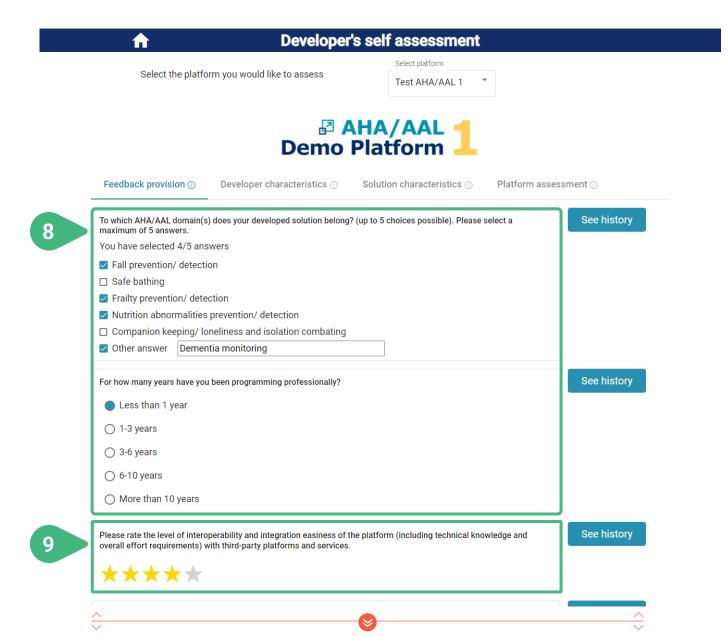
- Upon entering this functionality from the main screen, the user must first Select the platform to assess and view feedback for, before any additional information is presented in this screen. The user can change the platform as desired.
- 3) The logo of the selected platform is then displayed.
- 4) There are four tabs available with the following functionalities:
 - Feedback provision, which is selected by default
 - Developer characteristics
 - Solution characteristics
 - Platform assessment
- 5) An (i) icon can be found next to the various tool functionalities as they appear on the screen. These icons serve as an interactive usage-guide while the user is using the tool. When moving the mouse on top of one of these icons, the user can see a pop-up message with more information about the particular functionality.

DEVELOPER'S SELF ASSESSMENT | Feedback provision (I)



- The **Feedback provision** tab is selected by default. In this tab the developer can see a list of available questions (questionnaire) and answer them in order to provide feedback regarding the developer's (own) characteristics, the characteristics of the developed solution/product and the platform used; also view the history of the developer's (own) previously provided feedback and self-assess his/her progress while using the platform.
- There are four types of questions possible: structured answer, rating, text and rating and text. For each of the questions the developer can view its potential answers (depending on the question type). If the developer has previously provided answers to a particular question and saved them, the most recently provided answers are highlighted or displayed by default (depending on the question type). The developer can change the provided answers or answer additional questions.

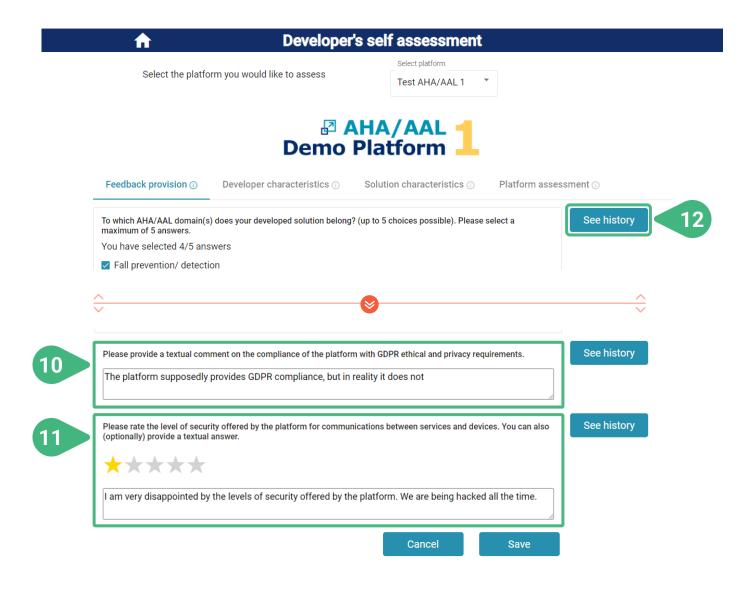
DEVELOPER'S SELF ASSESSMENT | Feedback provision (II)



- 8) Structured answer question: The title of the question is followed by a number of possible predefined answers. The developer can choose a number of answers from the pool of available ones. The number of answers that can be chosen can differ per question. If this number is more than 1, it is indicated next to the title of the question. If only one answer is acceptable each answer choice is indicated by a selectable bullet. If more answers are possible each choice is indicated by a selectable checkbox. Depending on the configuration of the question, the developer may also be able to type a free text answer.
- 9) Rating question: The title of the question is followed by a rating bar used to accommodate the developer's rating of the particular aspect. The rating is provided in a 5-level scale represented with 5 stars. One star indicates a poor rating and five stars an excellent one. The user can move the mouse over the stars to highlight the number of stars desired. Then, by clicking the desired star, the corresponding answer value is set. The ratings provided by all developers (only most recent answer from each developer) will be used to calculate the mean rating of the particular platform for this question.

DEVELOPER'S SELF ASSESSMENT | Feedback provision (III)

Accessible to user roles technology developer and administrator



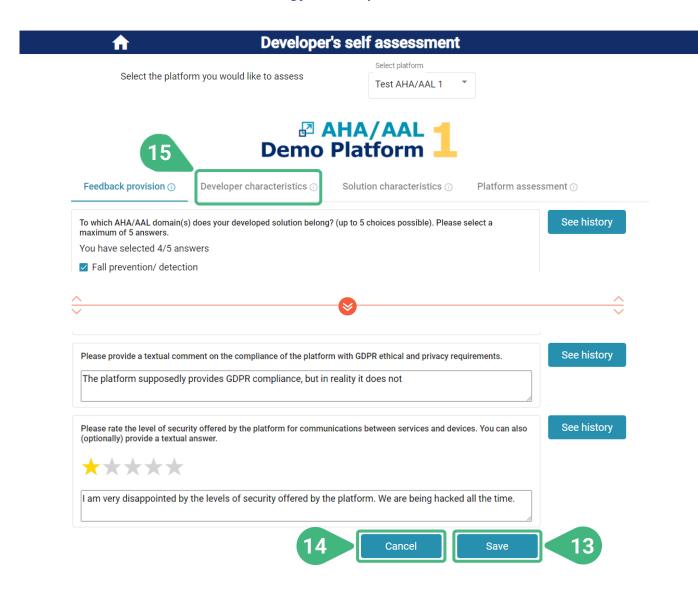
- a textbox to accommodate the developer's freely expressed opinion. The provided textual feedback is stored and can be presented anonymously to other developers and the provider of the particular platform, so that it can help them chose a particular platform or improve some of its aspects respectively. The textual feedback will be automatically annotated before being shown to indicate the positive or negative statements in the developer's opinion.
- **11)** Rating and text question: This is a combination of the previous two types. The title of the question is followed by a rating bar and a textbox, so that the developer can provide both a rating and textual feedback.
- 12) Click **See history** to view a history of the developer's (own) previously provided answers for the particular question and platform:

Date: 2022-02-11 20:26:55
Answer(s) provided:

Dementia monitoring
Frailty prevention/ detection
Fall prevention/ detection
Fall prevention/ detection
Leisure/ gaming

DEVELOPER'S SELF ASSESSMENT | Feedback provision (IV)

Accessible to user roles technology developer and administrator



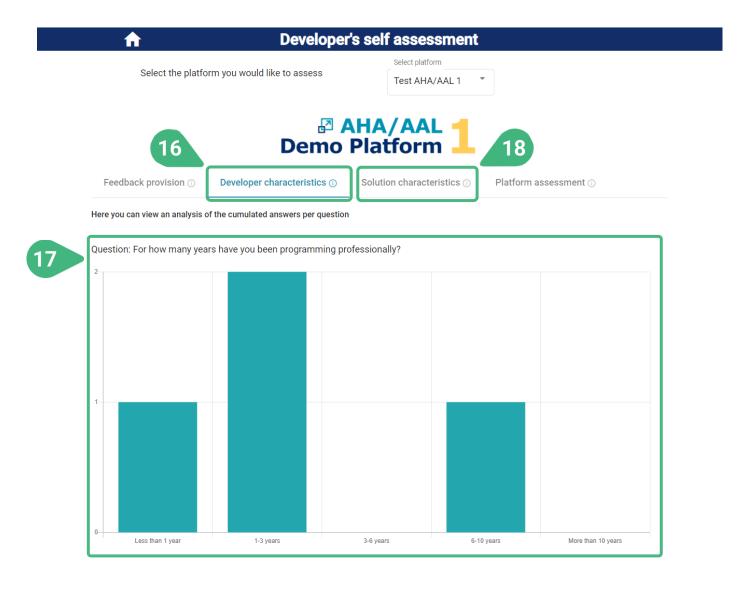
The Save and Cancel buttons only appear once the user makes a change to existing answers or chooses to answer a previously unanswered question.

13) Save the provided/updated answers to all questions of the questionnaire. Once the answers have been successfully saved, a relevant message appears on screen:

Answers have been saved successfully

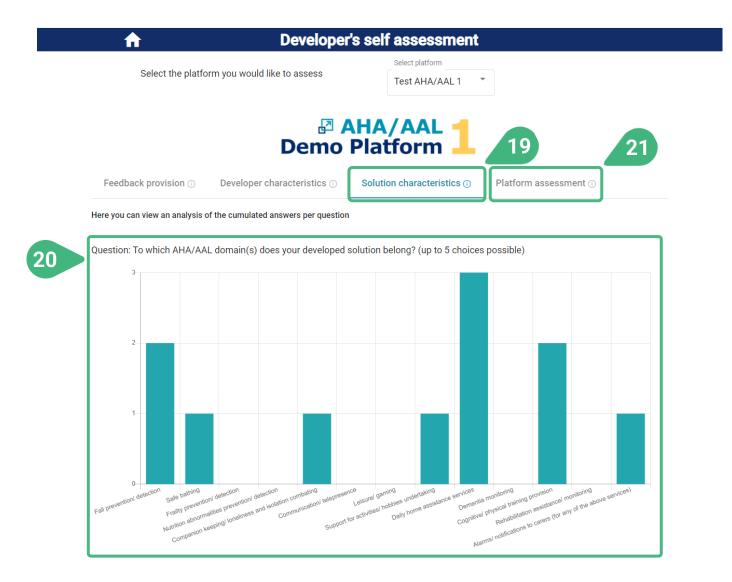
- 14) Cancel the modifications without saving. Any modifications made to the answers for all questions will be discarded. The latest saved answers for this user will be reloaded.
- 15) Select the **Developer characteristics** tab.

DEVELOPER'S SELF ASSESSMENT | Developer characteristics



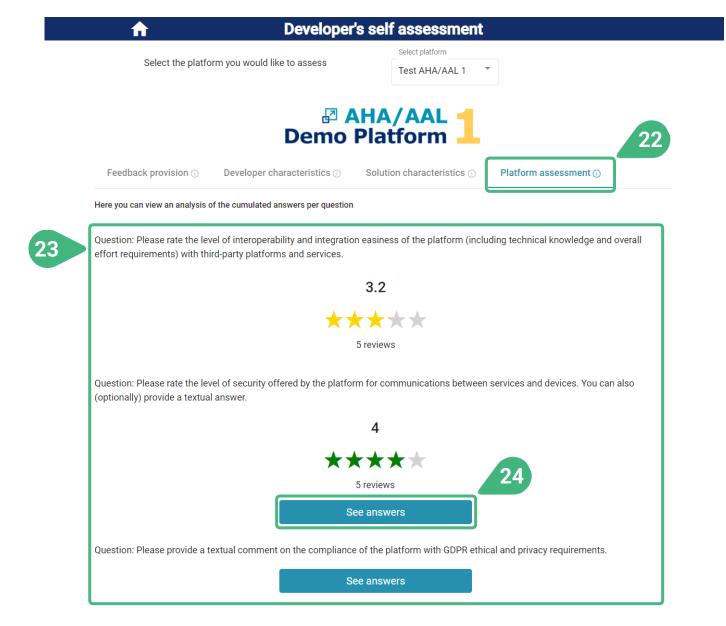
- 16) The Developer characteristics tab presents the analysis of the results for all questions regarding the characteristics of developers who have provided their opinion on the particular platform, based on the cumulative feedback of all developers who have answered the questionnaire. Only the most recent/up-to-date answer of each developer in a perquestion basis is taken into account. The developer characteristics questions can only have structured answers.
- 17) View a list of questions. The title of each question is followed by a visual analysis of the provided answers. The answers are visualised by means of a bar graph, which presents the cumulative responses to the question for the particular platform. The various predefined answer options are shown on the x-axis of the graph and the number of answers for each particular option is shown on the y-axis.
- 18) Select the **Solution characteristics** tab.

DEVELOPER'S SELF ASSESSMENT | Solution characteristics



- 19) The Solution characteristics tab presents the analysis of the results for all questions regarding the characteristics of solutions/products developed using the particular platform, based on the cumulative feedback of all developers who have answered the questionnaire. Only the most recent/up-to-date answer of each developer on each question is taken into account. The solution characteristics questions can only have structured answers.
- 20) View a list of questions. The title of each question is followed by a visual analysis of the provided answers. The answers are visualised by means of a bar graph, which presents the cumulative responses to the question for the particular platform. The various predefined answer options are shown on the x-axis of the graph and the number of answers for each particular option is shown on the y-axis.
- 21) Select the **Platform assessment** tab.

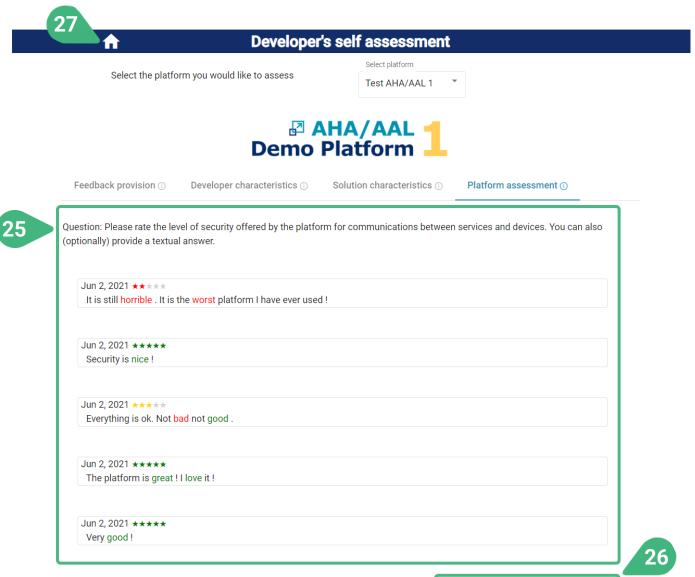
DEVELOPER'S SELF ASSESSMENT | Platform assessment (I)



- 22) The **Platform assessment** tab presents the analysis of the results for all questions regarding the assessment of the various aspects of the particular platform, based on the experiences shared by all developers who have provided their feedback by answering the questionnaire. Only the most recent/up-to-date answer of each developer on each question is taken into account. The platform assessment questions can be of the type: *rating*, *text* or *rating* and text.
- 23) View a list of questions. The title of each question is followed by a visual analysis of the provided answers. If the question is of the type *text* or *rating* and *text*, they can also contain textual feedback.
- 24) Click **See answers** to view the provided textual feedback for the particular question and platform. A new screen appears.

DEVELOPER'S SELF ASSESSMENT | Platform assessment (II)

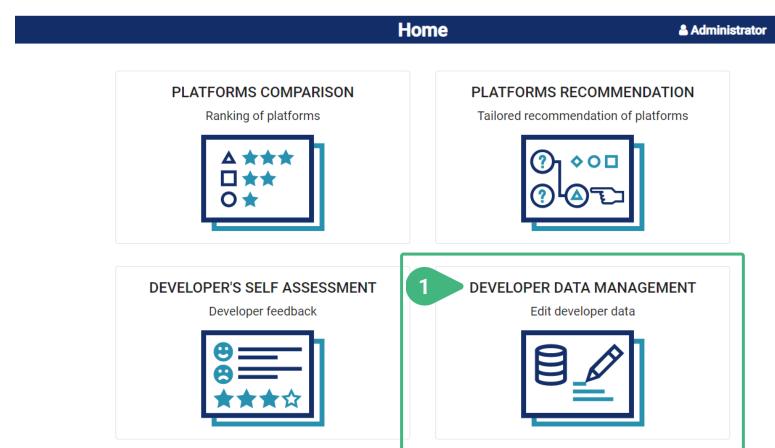
Back



- 25) View a list of textual answers as provided by the individual developers in an anonymous manner. Also view ratings, depending on the question type. Only the most up-to-date feedback from each developer is shown. In each of the textual answers, various parts of the text are highlighted with different colors depending on whether they have a positive or negative meaning.
- 26) Click on Back to go to the previous screen.
- **27)** Click on the **Home icon** to go back to the main screen and choose another functionality.

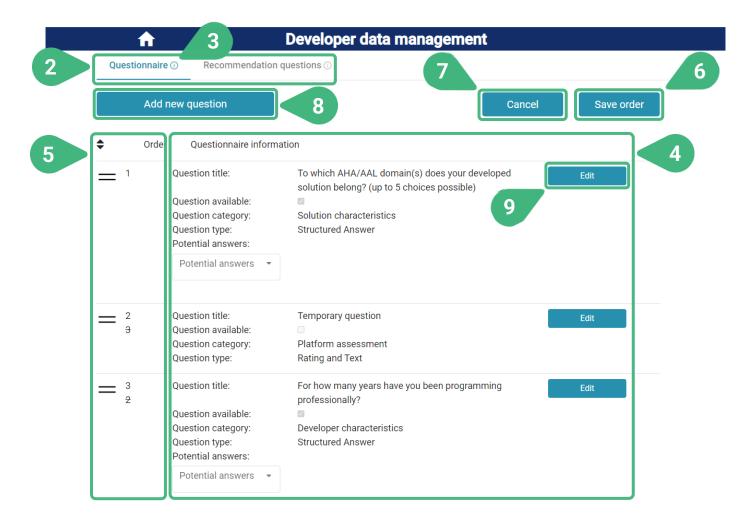
DEVELOPER DATA MANAGEMENT

Accessible to user role administrator



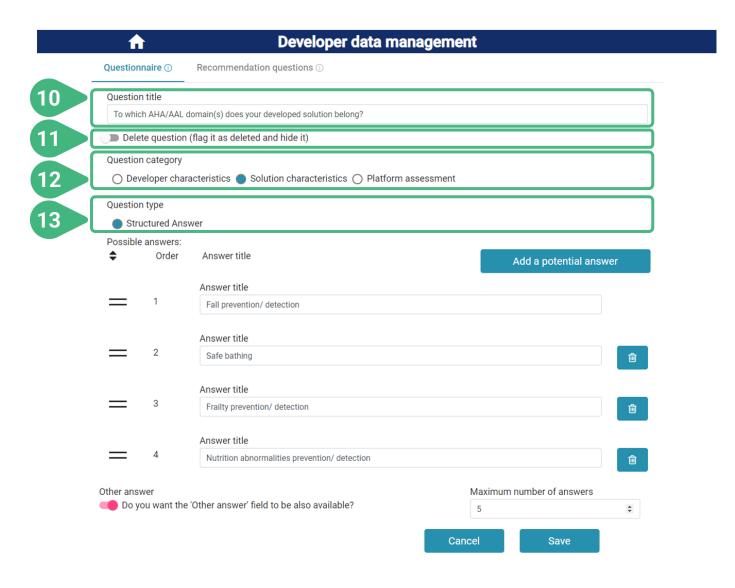
1) When the administrator clicks on the **Developer** data management card, a new screen appears showing the relevant functionality.

DEVELOPER'S SELF ASSESSMENT | Questionnaire (I)



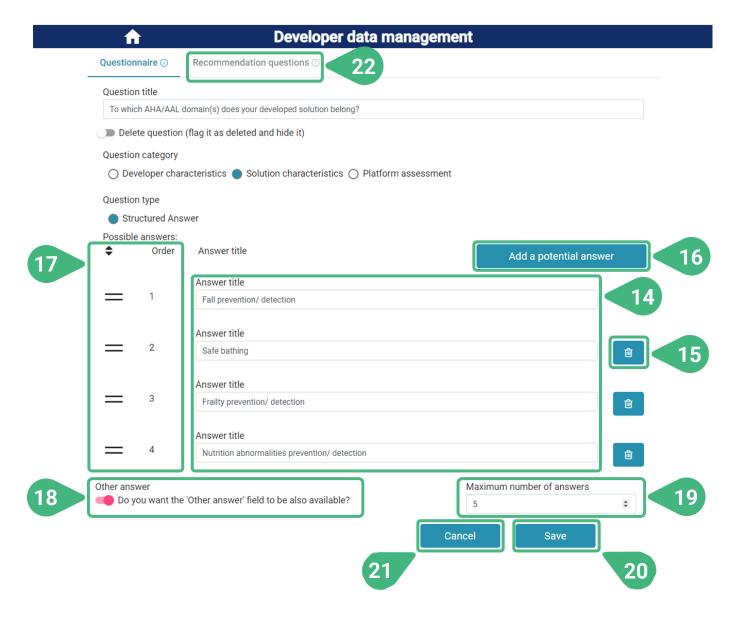
- There are two tabs available with the following functionalities Questionnaire, which is selected by default, and Recommendation questions.
- 3) An (i) icon can be found next to the various tool functionalities as they appear on the screen. These icons serve as an interactive usage-guide, showing information about the particular functionality when moving the mouse on top of them.
- 4) View of the list of existing questions that appear in the questionnaire addressed to technology developers along with their details.
- The user can change the **Order** of appearance of a question by holding the " == " sign and moving it upwards or downwards. The order of all other questions is automatically updated and the old order is displayed in a strike-through manner. The Save and Cancel buttons appear if the order is changed.
- **Save** the updated order of the questions.
- 7) **Cancel** the changes and revert to previous order.
- 8) Click **Add new question** to introduce a new question in the questionnaire. A new screen appears.
- Click Edit to edit an existing question. A new screen appears with pre-filled data of the existing question.

DEVELOPER'S SELF ASSESSMENT | Questionnaire (II)



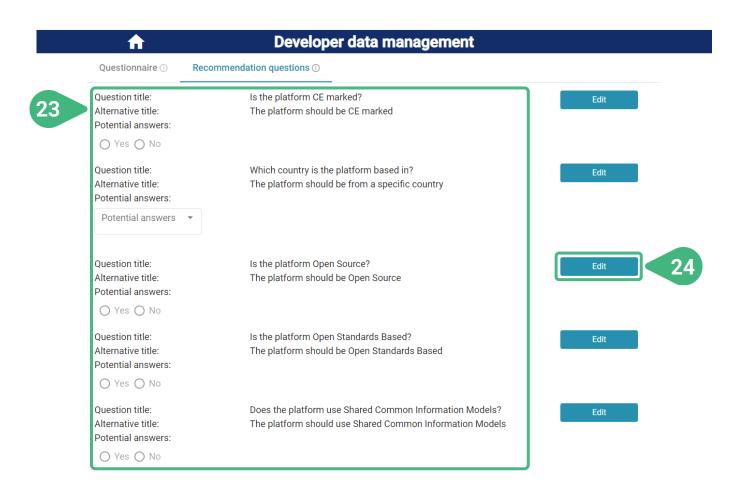
- 10) Edit the Question title.
- 11) Flag the question as invisible (Delete question) in order to hide it from other functionalities of the tool while retaining all relevant data. It will remain hidden until unflagged.
- Select the Ouestion category (Solution characteristics shown). For each question only one category can be selected among the following three Developer characteristics, Solution choices: characteristics or Platform assessment. The category indicates which entity under assessment this question refers to and is used for grouping the results per entity when visualising the analysis of the provided feedback.
- 13) Select Question type (Structured answer shown). The type indicates the expected (and accepted) type of answer to the question. Only one type can be selected for each question. There are four types available: Rating, Text, Rating and text, Structured answer. Which type can be chosen depends on the question category. Developer characteristics and Solution characteristics are only compatible with Structured answer. Platform assessment can be Rating, Text or Rating and text.

DEVELOPER'S SELF ASSESSMENT | Questionnaire (III)



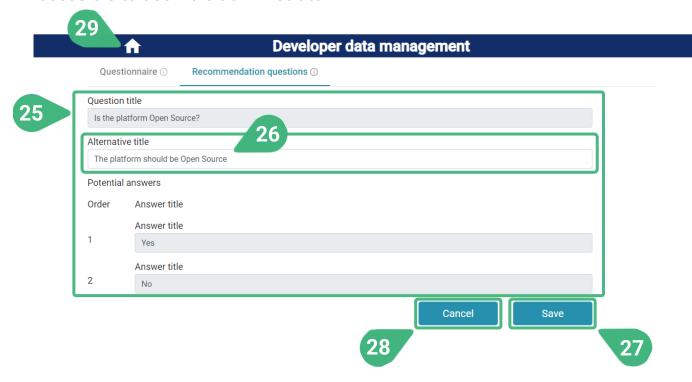
- **14)** Edit the **Answer title** of existing predefined answers for the question.
- **15)** Remove an existing answer from the pool of available ones by clicking the **recycle bin** icon next to a particular answer.
- **16)** Add a potential answer to the pool of available ones.
- 17) Change the **Order** of appearance of the available possible answers by holding the "sign and moving it upwards or downwards. order of all other answers is automatically updated and the old order is displayed in a strike-through manner.
- 18) Define if the respondent can provide **Other answer** apart from the predefined ones, by typing free text.
- 19) Define the Maximum number of answers that the respondent can choose. The minimum value for this field is 1 and the maximum value equals the total number of possible answers, including the *other answer*, if this option has been selected.
- **20) Save** the updated question and go back to the previous screen.
- 21) Cancel the modifications without saving.
- 22) Select the **Recommendation questions** tab.

DEVELOPER'S SELF ASSESSMENT | Recommendation questions (I)



- 23) View the list of existing recommendation questions and their details. The recommendation questions are the questions presented in the first step ("EXPECTATIONS") of the *Platforms recommendation* functionality. These are the same as the contextual questions of the platforms, which can be managed (introduced, edited, hidden) by an administrator of the Tool for platform providers. All contextual questions which are not flagged as invisible are available as recommendation questions.
- **24)** Click **Edit** to edit/introduce some of data of an existing question. A new screen appears.

DEVELOPER'S SELF ASSESSMENT | Recommendation questions (II)



- 25) View the characteristics of the recommendation/ contextual question.
- Only the **Alternative title** of the recommendation question can be edited. This is the title that will be presented in the *Platforms recommendation* functionality in order to appropriately formulate the question for this purpose. All other characteristics of the recommendation/contextual question can only be edited via the tool for platform providers.
- **27) Save** the updated recommendation question alternative title and go back to the previous screen.
- **28) Cancel** the modifications without changing the alternative title and go back to the previous screen.
- **29)** Click on the **Home icon** to go back to the main screen and choose another functionality.