4FUN

"The FUture of FUlly integrated human exposure assessment of chemicals: Ensuring the long-term viability and technology transfer of the EU-FUNded 2-FUN tools as standardised solution"

Grant agreement No.: 308440 (Collaborative Project)

Deliverable D6.2. 4FUN Website

Due date of deliverable: January 2014
Actual submission date:

Start date of project: 1st October 2012   Duration: 36 months

Coordinator	AEIFORIA
Deliverable Leading Partner	AEIFORIA
Contributing Partners	All
Task	6.1: Development of project website and a web-based platform
Revision	

Project co-funded by the European Commission under the Seventh Framework Programme (FP7)		
Dissemination Level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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1   Website structure

The 4FUN project focuses on a prototype software for the assessment of human health risks from exposure to chemicals developed in the frame of a past project (2-FUN). The objective of the 4FUN project is to take the promising results from 2-FUN project to the market following standardization processes and dissemination activities with the aim to convert the prototype into a widely used software.

In order to achieve this aim a website was developed to promote the project and to raise awareness on its outcomes to the outside world. The 4FUN website can be accessed through the following link: http://4funproject.eu/ (Figure 1).

Figure 1. Homepage of the 4FUN website.

The website has both static and dynamic contents. The static content consists of information giving an overall introduction to the project.

The dynamic part contains current news, events, information on the training courses, and the achievements of the project. The dynamic content will be updated on a monthly basis.

Additionally the website has a private area which can be accessed only by 4FUN project participants. Through this area the partners will be able to store internal documents, to exchange information, to plan their work, etc.…

In all the pages of the website it is possible to identify four parts:

1) The top

In the upper right corner (Figure 2), the user can choose among different **languages** (English, Italian, Spanish, France, Sweden, Serbian, and German). By clicking on each country abbreviation the website content will be shown in the chosen language. Only some of the website topics will be translated in the mentioned languages, allowing an easier management of the website. Translations will be provided in the course of the project. Every translation from English (the default language) will be responsibility of the partner that provides the translation.

In the middle of the top part the **4FUN logo** is shown. Clicking on the logo the user can always go back to the home page.

Under the logo a **horizontal menu bar** is shown (Figure 2). This menu bar contains the main menus of the website, which are: about 4FUN, news & events, results highlight, documents, software, contact, and members. All the menus will be described in detail in the following paragraphs. By moving the mouse over each menu, a list of the available sub-menus will pop-up. When the user selects a menu, the selected menu is shown in a green colour in order to facilitate the navigation through the website. An example is shown in Figure 2.

Figure 2. The top part of the 4FUN website.

2) The middle

In the middle part of the 4FUN website, the main contents of the different menus and sub-menus are shown. In the following paragraphs all the menus and sub-menus will be described.

3) The side

On the left-hand side of the 4FUN homepage, different sections are present (Figure 3):
a) **the highlights** that helps in focusing the attention of the user to some particular issues. The user can know more about each highlight clicking on the button 'more info'. The highlights will be added and modified during the curse of the project. The highlights present at the moment are:

- **The 4FUN tool**

The 4FUN tool is designed to be transparent and its fundamental structure and logic are easily understandable. A systematic comparison with actual data will improve the reliability of modelling calculations.

A library of modules will be available through the web platform, from where the users can get access to previously developed modules. Advances exposure assessment methodologies will be merged and integrated in a common tool.

- **SWOT analysis**

  A SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) of the 2-FUN tool and other exposure tools will be performed in order to identify strengths and weakness of the 2-FUN tool.

  A list of existing exposure tools will be made available. Then, a list of criteria will be set up in order to carry out the SWOT analysis considering also regulators and stakeholders requirements. This will lead to a list of actions for updating the design of the final tool. Beyond literature and policy review, this analysis will benefit from stakeholders consultation through targeted interviews.

- **4FUN schools**

  To promote the widespread use and skill required to use the tool highly specialised courses ("4FUN Schools") will be organised in different locations.

  Starting from the end of 2014 "4FUN Schools" will be organized in order to exchange knowledge and awareness on the use of the final tool. All the participants will have the possibility to interact and share experiences and activities with high-level experts in the thematic area. Each participant will carry out his/her personal case study in order to achieve a better practice.

b) the search tool which helps the visitor to find easily different topics within the project website

c) news & events where the news and events appears. Clicking on each item the visitor is redirects to the news & events menu. Using the arrows the visitor can browse among the different news and events

d) newsletter that allows the user to subscribe to the project newsletters (to be implemented)

e) find us that allows the user to connect to the 4FUN project using social networks as Twitter and LinkedIn (to be implemented)

f) home that redirects to the homepage

g) contact us that redirects to the contact page

h) sitemap that shows the sitemap of the website.

Figure 3. The side of the 4FUN website.

4) The bottom

In the bottom part of the 4FUN homepage (Figure 4), the details about the project are given:

> 4FUN is a project funded by the EC 7th Framework Programme (FP7-ENV-2012-two-stage/ Theme ENV.2012.6.5.-2) under grant agreement n° 308440.
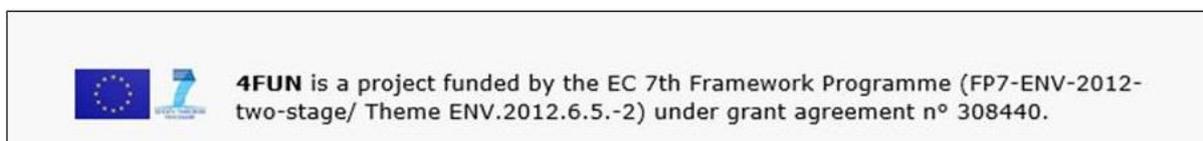
The logos of the EC and the FP7 are shown.

Figure 4. Bottom part of the 4FUN website.

2 The home page

In the central part of the 4FUN homepage (Figure 1), **the project** is briefly described as follows:

> **4FUN: The FUture of FUlly integrated human exposure assessment of chemicals: Ensuring the long-term viability and technology transfer of the EU-FUNded 2-FUN tools as standardized solution.**
>
> The **4FUN project**, funded under the EU 7th Framework Programme, aims at delivering a **standardized tool** for **human exposure assessment to chemicals.**
>
> The final tool will integrate on the same platform multimedia, PBPK, and dose-response models, allowing covering the entire exposure assessment chain (from concentration in water, air and/or soil to internal dose to target organs and eventually pathology risks). In this way it will be possible to carry out lifetime exposure assessments for different human populations including exposure through multiple pathways.
>
> The **long-term viability** of the final tool will be guaranteed analysing the compliance of the software with relevant criteria, performing benchmarking activities, analysing the marketing environment, formulating a business plan, and identifying stakeholder requirements.
>
> Furthermore, standardisation activities and training courses will ensure respectively the **transparent applicability** and **technology transfer** of the final software.

Furthermore, under the project description the section '**important documents'** appears. Here the documents uploaded in the 'document' menu are shown in a chronological order allowing the visitors to view the latest documents published on the website.

3   About 4FUN

As stated above, moving the mouse over each menu on the horizontal menu bar, a list of sub-menus pops-up (Figure 2).

For the 'about 4FUN' menu, four sub-menus are available: background, aims, work packages and partners (Figure 2). The content of each sub-menu will be static and is described below.

3.1   Background

The following text is shown in the background sub-menu:

> The assessment of risks to human health from chemicals is of major concern for policy and industry and benefits all citizens. It is mainly based on the exposure and the dose-response assessment.
>
> Exposure assessment is generally considered to be the weakest point in risk assessment because currently available tools show major flaws (e.g. lack of integrated approach for assessment of combined stressors, use of 'worst-case' scenarios leading to over-conservative results, lack of uncertainty/sensitivity tools for identifying the important exposure drivers, output provided in terms of intake rates because environmental multimedia and PBPK models are not integrated, standardisation processes not considered).
>
> To overcome these drawbacks, the **2-FUN project** (http://www.2-fun.org), funded under the EU 6th Framework Programme, produced a prototype software containing a library of models, coupling environmental multimedia and pharmacokinetic models.
>
> This software, the 2-FUN tool, resulted to be an innovative and useful instrument for the assessment of human health risks from exposure to chemicals. However, **the 2-FUN tool was a 'prototype' and not a 'standardised' software**.
>
> The **4FUN project** will take the results from the 2-FUN project to the market following thorough standardization processes and dissemination activities (Fig 1).

Figure 1. Interaction between 2-FUN and 4FUN.

3.2   Aims

In this sub-menu the aims of the 4FUN project are described as reported below:

The shift from a 'prototype' (the 2-FUN tool) to a 'standardised' software is the main objective of the 4FUN project.

In particular, the 4FUN aims to:

1. Innovate and exploit the 2-FUN prototype software

•An analysis of the strengths, weaknesses, opportunities and threats (SWOT) of existing exposure assessment tools (including 2-FUN) will be conducted

•Case studies based on actual datasets will be used to improve the reliability of modelling estimations and to demonstrate the feasibility of building complex realistic scenarios

2. Standardise the 2-FUN prototype software

•The improved 2-FUN software is intended to reach a wide range of end-users (regulators, SMEs, industries, academics) and to support policy making, therefore a rigorous standardisation of the software will be carried out

3. Transfer the improved tool to stakeholders

•Stakeholder and end-user requirements will be identified

•Improved and standardised 2-FUN software will be delivered, together with supporting documentation and training courses

4. Guarantee long term technical and economic viability of the improved tool

•based on detailed market research a sustainable business model will be developed

3.3   Work Packages

In the work packages sub-menu (Figure 5) all the work packages are briefly described as reported below. The description appears when the user clicks on each work package. For each work package the name and email address of the contact person is shown.
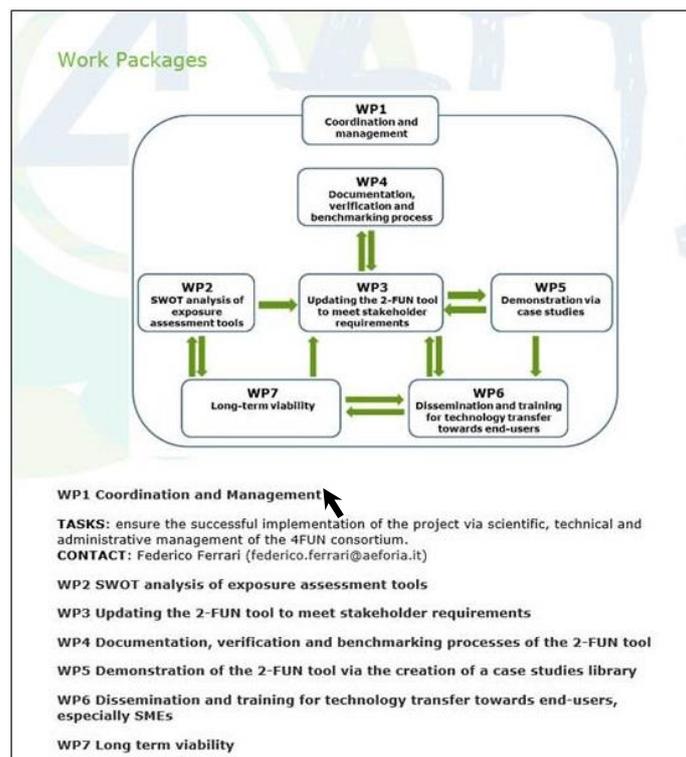

Figure 5. Work packages description page.

WP1 Coordination and Management
TASKS: ensure the successful implementation of the project via scientific, technical and administrative management of the 4FUN consortium.
CONTACT: Federico Ferrari (federico.ferrari@aeforia.it)

WP2 SWOT analysis of exposure assessment tools
TASKS: identify the strengths and weakness of the 2-FUN tool (considering stakeholders, methodological and data needs in exposure assessment for chemicals in the EU) through a SWOT analysis. Identify of key stakeholders and regulatory frameworks for exposure assessment.
CONTACT: Tineke Dewilde (tineke.dewilde@arche-consulting.be)

WP3 Updating the 2-FUN tool to meet stakeholder requirements
TASKS: upgrade the integrated 2-FUN tool using the results from the other work packages as input in order to satisfy stakeholder requirements. Monitor the progress and risks of the project.
CONTACT: Philippe Ciffroy (philippe.ciffroy@edf.fr)

WP4 Documentation, verification and benchmarking processes of the 2-FUN tool
TASKS: produce the standardization (i.e. Quality Assurance) and guidance documentations. Build confidence in the tool through verification and benchmarking processes. Facilitate assimilation by end-users.
CONTACT: Boris Alfonso (boris@facilia.se)

WP5 Demonstration of the 2-FUN tool via the creation of a case studies library
TASKS: increase the confidence in the applicability of the improved tool through demonstration activities based on complex realistic case studies. Improve reliability of modelling calculations through systematic comparison with actual measurements. Demonstrate how uncertainty margins can improve risk governance and the feasibility of building complex realistic scenarios for satisfying stakeholder needs.
CONTACT: Celine Brochot (celine.brochot@ineris.fr)

WP6 Dissemination and training for technology transfer towards end-users, especially SMEs
TASKS: distribute the improved, tested and validated tool, together with documentation and training materials. Ensure that the tool is fully suitable for regulatory use in the EU, within the context of the relevant regulatory frameworks. Develop user-friendly guidance for the use of new approaches, data and tools developed by 4FUN.
CONTACT: Gabriella Fait (gabriella.fait@aeiforia.eu)

WP7 Long term viability
TASKS: ensure that the improved tool will be recognised in the long term as a standard, widely used tool. Ensure that further improvements/extensions of today's scope will be guaranteed. Ensure that the financing of these activities will be supported by a sustainable business model.
CONTACT: Romain Striffling (romain.striffling@bearingpoint.com)

3.4   Partners

In this section the user will be able to view a list of all participating organizations, to view the main expertise of each organization, to redirect to the partners web site by clicking on the

respective hyperlink, to view the name of all the participants and the emails of the contact persons.

In this sub-menu the 4FUN consortium is described as follow:

The 4FUN consortium consists of 14 partners from 9 European countries and comprises SMEs, research organizations, large companies, non-governmental organization and a non-profit standardization organization.

AEIFORIA Srl – Italy (Coordinator)	**Expertise:** risk assessment, management and communication, pesticide fate modelling, environmental monitorings **Website:** www.aeiforia.it **4FUN participants:** Gabriella Fait, Federico Ferrari (federico.ferrari@aeiforia.it), Tommaso Ferrari
Electricité de France S.A. – France	**Expertise:** (eco)toxicology, exposure assessment, environmental and health risk assessment, multi criteria decision analysis, modelling **Website:** www.edf.fr **4FUN participants:** Philippe Ciffroy (philippe.ciffroy@edf.fr), Laura Marang, Bertille Richard, Taku Tanaka
Facilia AB – Sweden	**Expertise:** risk assessment, radioecology, simulation modelling, software development, web programming, statistical methods **Website:** www.facilia.se **4FUN participants:** Boris Alfonso, Rodolfo Avila, Annika Johansson, Erik Johansson (erik@facilia.se)
Institut National de l'Environnement Industriel et des Risques – France	**Expertise:** human toxicology, multimedia modelling, regulation in environmental and health, risk assessment **Website:** www.ineris.fr **4FUN participants:** Celine Brochot (celine.brochot@ineris.fr), Alexandre Pery, Florence Zeman
Vlaamse Instelling Voor Technologisch Onderzoek N.V. – Belgium	**Expertise:** risk assessment, exposure modelling, biomonitoring **Website:** www.vito.be **4FUN participants:** Johan Bierkens (johan.bierkens@vito.be), Tine Fierens, Mirja Van Holderbeke
ARCHE bvba – Belgium	**Expertise:** environmental toxicology, exposure modelling, preparation of risk assessment dossiers for industry **Website:** www.arche-consulting.be **4FUN participants:** Tineke Dewilde, Patrick Vansprang, Frederik Verdonck (frederik.verdonck@arche-consulting.be)
Agencia Estatal Consejo Superior de Investigaciones	**Expertise:** fate of environmental pollutants, environmental chemistry

Cientificas – Spain	**Website:** http://www.cid.csic.es/
	4FUN participants: Damià Barcelo Culleres, Zoran Banjac, Marinella Farré Urgell, Antoni Ginebreda Marti (agmqam@cid.csic.es)
Consorzio Venezia Ricerche – Italy	**Expertise:** environmental risk assessment and management, rehabilitation of contaminated sites, development of GIS-based Decision Support Systems (DSSSs), Multi-Criteria Decision Analysis (MCDA)
	Website: www.veneziaricerche.it
	4FUN participants: Elisa Giubilato (giubilato@unive.it), Marina Zago
Università Ca' Foscari Venezia – Italy	**Expertise:** analytical determination of pollutants in environmental matrices, environmental modelling, human and ecological risk assessment
	Website: www.unive.it/dais
	4FUN participants: Andrea Critto (critto@unive.it), Antonio Marcomini
BearingPoint – Switzerland	**Expertise:** business consulting, technology transfer
	Website: www.bearingpoint.com
	4FUN participants: Helene Gauche, Xavier Houot, Romain Striffling (romain.striffling@bearingpoint.com)
Enviresearch Ltd. – United Kingdom	**Expertise:** consulting in regulatory and risk assessment, technology transfer through training
	Website: www.enviresearch.com
	4FUN participants: James Garratt (garratt@enviresearch.com), Loraine Smith
Group for Environmental Awareness Development – Serbia	**Expertise:** promotion of environmental awareness, operational projects for environment protection (Natura 2000)
	4FUN participants: Aleksandar Vlajic (a.vlajic@gres.org.rs)
Austrian Standards Institute – Austria	**Expertise:** development of norms, rules, and standards, coordination of the Austrian experts in the development of European and International standards
	Website: www.as-institute.at
	4FUN participants: Annette Altenpohl (annette.altenpohl@as-institute.at), Karl Gruen, Josef Winkler
EUrelations AG – Switzerland	**Expertise:** project management, innovation strategies, dissemination of scientific results also to non-scientific target audience, training
	Website: www.eurelations.com
	4FUN participants: Katrin Reschwamm

	(KReschwamm@eurelations.com)
Università Cattolica Del Sacro Cuore – Italy	**Expertise:** risk assessment and management, risk communication, stakeholder analysis and communication
	Website: http://www.unicatt.it/
	4FUN participants: Ettore Capri (ettore.capri@unicatt.it), Nicoleta Suciu, Marco Trevisan

4 News & Events

In the 'news & events' menu, three sub-menus are available: events, news and 4FUN Schools (Figure 6).

This section will provide to the visitors of the web site the latest news about the activities of the project such as participation to events and workshops as well as other news related to 4FUN project. The contents of this section will be dynamic and the information that will be shown to the end user will be provided by the project partners.

Figure 6. News & Events page.

In the **news** sub-menu relevant news will be listed, for example: conferences, workshops, link to publications, etc… Clicking on each item more information on the selected news is shown.

In the **events** sub-menu all the events attended and/or organized by the 4FUN partners will be listed. Furthermore, here the user can download relevant documents related to each event. Clicking on each item more information on the selected events is shown.

In the **4FUN Schools** sub-menu all the information regarding the training course will be available.

5 Results Highlight

In the 'result highlight' menu, the user will find all the relevant outcomes of the project (Figure 7). This section will contain dynamic content and therefore will be periodically updated according to the project findings.

Figure 7. Results Highlight page.

6 Documents

In the 'documents' menu, all the relevant documents, such as flyers, posters, publications, etc… will be listed (Figure 8). This section will be periodically updated.

Figure 8. Documents page.

7   Software

The 4FUN consortium has devised a strategy of two interlinked, but distinct websites: the proper website, described in this document, and a web-based platform. From the the web-based platform the users will be able to download the latest version of the tool and accompanying documentation, training materials, etc... However, the 4FUN platform will be ready in September 2013 and described in a specific document.

In the menu 'software' on the horizontal menu bar (Figure 9), the user will find a description of the 4FUN platform and a link (http://software.4funproject.eu) from which the user will be redirected to the 4FUN platform. As stated above, all the functionality of the 4FUN platform will be ready in September 2013.

Figure 9. Link to the 4FUN platform.

8   Contact

Clicking on the 'contact' menu on the horizontal menu bar, the user can access the 'contact' page (Figure 10).

After filling the required fields and clicking on the 'submit' button, the user can get in contact with the 4FUN participants in order to ask questions and/or require more information regarding the project.

Figure 10. Contact page.

9 Members

The website has a private area (Figure 11) which can be accessed clicking on 'members' on the horizontal menu bar.

Only the participants to the 4FUN project can have access to this area. Registered users will provide their credentials in order to be redirected to the Members area. Through this collaboration area partners will be able to store internal document, exchange information, plan their work, access to the internal discussion, etc.

Figure 11. Members area.