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DELIVERABLE (D-PM2.1) Communication Action Plan (CAP)

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RAPHAEL (ReActor for Process heat, Hydrogen And ELectricity generation)







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Document title Communication Action Plan (CAP) Executive summary

In addition to dialogue with the nuclear community, some communication towards non-specialists is part of the objectives of the RAPHAEL project.

This document presents the objectives, vision and messages, targets, media and the actions required in the communication plan, along with the roles and responsibilities of the actors.

	Revisions											
Rev.	Date	Short description	Author	WP Leader	SP Leader	Coordinator						
00	15/10/2005	First issue	V.Chauvet, STEP	D.Hittner, FANP-F	D.Hittner, FANP-F	D.Hittner, FANP-F						
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02	15/04/2006	Revision 2 with updated Event management plan	V.Chauvet, STEP	E.Bogusch, ANP <i>L. M</i>	E.Bogusch, ANP <i>L. An</i>	E.Bogusch, ANP <i>L. M</i>						





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1 Stakes, vision and objectives

1.1 <u>Context & Objectives of the Communication Action Plan (CAP)</u>

The RAPHAEL project's objectives of knowledge dissemination shall be achieved in two ways:

- Direct dissemination and exploitation of knowledge is ensured by the participation of major industrial actors in the RAPHAEL consortium, and by interactions with international cooperation, in particular with the Generation IV International Forum (GIF).
- General communication on the project's existence, partners, organisation, objectives, results, etc. The targets potentially include any public not participating in the project. This point is a major difference with previous European projects, which only foresaw communication towards specialists.

The CAP aims at structuring all the project's external communication actions.

However, in some cases it shall only refer to actions that are being organised in other frames of the project (e.g. education, interactions with GIF, etc.).

1.2 Vision & Messages

The objective of the RAPHAEL communication is to collectively create a **vision of V/HTRs for non-specialists**, composed of three main messages:

- 1. HTRs offer solutions for **answering the challenge of global warming**, while also addressing the radioactive **waste** and fissile **resource supply** issues
- 2. They are **smaller**, inherently **safe** reactors with **multiple applications**, which can be directly coupled to industrial needs;
- 3. It is strategic for Europe to maintain its technological leadership and secure energy procurement in the mid-future

This vision requires to be translated into **10 individual messages**:

M1.1 – "Solutions to global warming"

In order to meet the challenges of **global warming** and **oil depletion** in a context of fastgrowing world demand, it is necessary to develop CO_2 -free production systems, not only for **electricity** (which represents less than 20% of world uses), but also for **transport** and **heat** needs, both domestic and industrial.

M1.2 – "Innovation in nuclear fission"

Innovative nuclear systems will need to be able to address all concentrated needs (renewable energies being adapted to decentralised needs).

M1.3 – "VHTR, a multiple energy provider"

Out of the 6 systems being investigated in the "4th Generation", the **(V)HTR** is the only one to provide high-temp heat, including for **hydrogen** production. In addition to the strong present





industrial needs for H2, nuclear systems will then potentially address transport needs in the mid-future "hydrogen economy".

M1.4 – "Near future"

The **time gap** is not very long. (V)HTR development requires challenging innovation, but based on tangible experience, as HTRs were already operated. An estimated time-to-market for (V)HTRs is around 2025. This is an important message in the communication towards non-specialists (justify the need for Gen IV in a media environment focused on ITER and fusion).

M1.5 – "Environmental impact, a key issue"

(V)HTRs are **environmentally benign** (robust fuel with no significant radioactive release), and the R&D being carried out investigates the key questions of **resource** utilisation and waste management (excellent disposal behaviour, potential for transmutation, thorium cycle, symbiosis with breeders).

M2.1 – "Small and flexible"

(V)HTRs are **smaller** systems that can be directly coupled to **multiple industrial needs** (electricity and heat processes).

M2.2 – "Innovation in nuclear safety"

(V)HTRs are passively **safe** (innovative safety concept based on the reactor design and the fuel's physical properties), and thus very **cost effective**.

M3.1 – "A chance for Europe"

In addition to its **leadership** in nuclear technology, Europe has a strong **background** on HTRs (past German experience). The RAPHAEL consortium brings together **multi-disciplinary excellence**.

M3.2 – "A strategic effort required"

Europe must invest R&D to **maintain** its technological leadership for such **strategic** future systems as HTRs, which are currently being developed by other countries (USA, China, Japan, RSA, Korea). The realisation of a European prototype would concretise this effort, as would a significant participation in an international construction.

M3.3 – "Jobs"

The present oil and climate situations contribute to a growing acceptance of the nuclear option in Europe. Development of innovative nuclear fission systems – in particular HTRs – will imply many **research and career opportunities** in Europe in the next years and decades.

2 Targets and media

2.1 Targets

Six groups are targeted in the Communication Plan, listed here in a decreasing order of importance:





- 1. European and national decision-makers
- 2. **Potential users** of (V)HTR (including heat users & H2 community)
- 3. Nuclear professionals: industrials & researchers
- 4. General public
- 5. Scientific community
- 6. **Universities** and students

2.2 Media

The media will be adapted to the targets, as described in the table below:

Target	Media
European and national	 Lobbying (strategy papers, meetings).
decision-makers	 General press, parliamentary press.
	 Participation in EU workshops & conferences
Potential users of (V)HTR	 RAPHAEL Industrial Users Advisory Group.
	 Presentations in specialised conferences and networking with
	professional associations.
Nuclear professionals	 Papers and presentations in nuclear conferences,
	congresses, and international cooperation structures.
	 Publications & articles in nuclear and energy press.
	• Internal communication in RAPHAEL partners' organisations.
	 RAPHAEL Safety Advisory Group.
	 Presentations to nuclear associations (WIN)
General public	 General press (press releases, press briefings).
Scientific community	 General scientific press.
	 Presentations in general scientific conferences.
Universities and students	• Eurocourse.
	 Presentations in universities.

3 Action Plan

3.1 Roles and responsibilities

3.1.1 All RAPHAEL partners

All RAPHAEL partners need to be actors of the present communication plan.

The guidelines of the present CAP and some support tools (see below) will provide some help, but each partner shall take initiatives in defining and carrying out their own actions.



In order to monitor the overall impact and to share experiences, partners should inform the Project Management Support of all communication actions, identifying the target and an estimate impact (number of public).

A yearly review of each partner's communication actions will also be organised in meetings of the RAPHAEL Steering Committee. This review must necessarily comprise **external communication towards non-specialists**.

It is advised that in each of the organisations participating in RAPHAEL, the scientific representatives associate their communication or press specialists.

Indeed, a **network of communication contact** points will be established by the RAPHAEL coordination. Communication issues encounter more importance than in past European consortia, and it is thus important to federate communication specialists around the RAPHAEL project. In particular, this network will make it possible to:

- Circulate messages, tools, information on the project and gather suggestions;
- Share communication experiences;
- Coordinate communication actions in specific countries;
- More generally, network communication people around the project, at a European level.

NB: It should be noted that partners' main representatives will always be informed (i.e. copy of email) of any direct information between the coordination and their communication specialists.

3.1.2 RAPHAEL Coordination

In addition to managing the communication network, the RAPHAEL coordination (Coordinator and Project Management Support) will provide communication support tools.

In order to help partners in delivering the 10 general messages described above, this **communication toolkit** will comprise:

- A RAPHAEL public information website (<u>www.raphael-project.org</u>)
- Brochures and posters
- Standard presentation slideshow for non-specialists
- Standard presentation articles for non-specialists
- ...

In addition, the coordination will monitor all international conferences in the nuclear field, as well as in other selected fields (science; energy; potential users' communities such as hydrogen, heat, etc.). Similarly, each partner should monitor national conferences in their country.





3.2 Key actions

Among the potential actions described in the present document, **four targeted actions are considered as a priority**. These actions are not exclusive, but these are where RAPHAEL partners' should focus their efforts in priority.

1. Enhance decision-makers' awareness on a strategic issue for Europe

Many of the RAPHAEL partner organisations have contact with national decisionmakers in their country. Communication on European R&D should be included in the dialogue with national stakeholders.

In addition to participating in national public debates on nuclear energy, this is particularly important as EU Member States, through the Council of the EU, are a key decisional actor in defining European R&D strategy.

2. Inform potential users of (V)HTR development

Communicate on HTRs and their assets to future potential users. In addition to major industries which will be represented in the RAPHAEL Industrial Advisory Group (IUAG), it is necessary to present the project to potential users in each country.

Participation in sector-specific conferences (hydrogen production, heat applications, etc.) or articles in specific press, are good opportunities for this kind of action. International conferences will be monitored by the Project Management Support, and participation will be organised by the RAPHAEL Executive Board. In addition, all partners should monitor national conferences in their country and decide on RAPHAEL papers and presentations.

A periodic RAPHAEL email newsletter, sent to such public, could be considered if necessary.

3. Promote RAPHAEL in the nuclear community

It is essential to present the project in international and national nuclear conferences, as was done in earlier (FP5) projects.

As for point 2, international conferences will be monitored and participation organised by the RAPHAEL coordination. In addition, all partners should monitor national conferences in their country and decide on papers and presentations.

4. Contribute to general public awareness on "VHTR, a multiple energy source of the next generation of nuclear fission systems".

This will be achieved by working on journalists' awareness of the solutions offered by HTRs.

All 10 messages listed above can be delivered, but some focus is required for each individual communication action, following a temporal guideline. This is particularly relevant for communicating to the press (general, scientific, energy, or nuclear press).





For instance, communication to the press throughout the project can be split into the following separate main events:

- 1. launch of an integrated European project to work on future innovative nuclear systems, to meet the challenge of global warming
- 2. focus on one issue (e.g. safety)
- 3. focus on one issue (e.g. economics)
- 4. focus on one issue (e.g. environment)
- 5. next step

It must be noted that the focus on one issue is always a "headline" but it is also the opportunity to deliver other messages. The website address (<u>www.raphael-project.org</u>, see below) can always be used to send any interested party to look for further information.

In addition to these four strategic priorities, actions will be carried out towards universities and students; however, these are not described in the present plan, as they are managed in the frame of RAPHAEL's Education & Training Work Package (SP-PM3).

3.3 Indicators

A few indicators will be followed in order to assess the impact of the CAP:

- Number & impact of presentations of the project
- Number & impact of articles in each press type (internal, general, nuclear, energy, scientific)
- Number & impact of papers in conferences (national & international)
- RAPHAEL website hits (additional indicators, such as countries of connection, will be considered)
- Number of presentations & meetings with potential end-users
- Number of presentations in universities

In addition to these qualitative indicators, any actions or decisions by stakeholders apparently resulting from the RAPHAEL communication plan, will be monitored.

3.4 Events Management Plan

The "**Event Management Plan**" is the operational tool used for the implementation of the present action plan. As such, it lists communication actions presently foreseen, and will be used for monitoring all communication actions during the project. It also lists any continuous communication actions. For each action it provides key information, including actors, place & date, targets and estimated impact.

It is an annex to the present document, available as a separate file ("RAPHAEL Events Management Plan.xls").



RAPHAEL-0510-D-PM2-1 Communication Action Plan -



ReActor for Process heat, Hydrogen And ELectricity generation EC FP6 Integrated Project # 516508 (FI6O)

					Audience							Countries	s	
Туре	When	Where	Person(s) in charge	Past events	cision- akers	tential sers	Iclear	eneral ublic	entific mm.	niv. & dents	Potential impact	addresse	Comments	More info
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Conference	21-26 Aug 2005	Brussels	J.Pirson (TE)	ICENES 2005 12th International Conference on Emerging Nuclear Energy Systems			Х					INT	Paper on "Important Viewpoints Proposed for a Safety Approach of HTGR Reactors in Europe"	http://www.sckcen.be/sckcen%5Fen/acti vities/conf/conferences/icenes2005/
Conference	5-8 Sept. 05	Prague	J. van der Laan (NRG)	EUROMAT-2005			х		x	х	1 600	INT	Presentation of the materials activities of the HTR-M/M1 and Raphael projects	http://www.euromat2005.fems.org/
Press	14 Nov. 05	EU	D.Hittner (FANP) / V.Chauvet (STEP)	Publitorial in Brussels's "Parliament Magazine"	Х				Х		20 000	EU25	Sent to EU officials	www.parliamentmag.com
Conference	14-15 Nov. 05	Brussels	D.Hittner (FANP) / V.Chauvet (STEP)	Stand at the CER-2005 conference	х	x			x		3 000	EU25	Audience: scientists, press, EU officials	http://www.europa.eu.int/comm/research/ conferences/2005/cer2005/index_en.html
Media briefing	14-15 Nov. 05	Brussels	D.Hittner (FANP), MT Dominguez (EA)	Press briefing at the CER-2005 conference	х	x	х	х	х		3 000	EU25	Post-briefing article in the conference journal "The ExCERpt"	http://www.europa.eu.int/comm/research/ conferences/2005/cer2005/pdf/cer_news_ 2_en.pdf
Conference	1 Dec 05	London	D.Buckthorpe (NNC)	RAPHAEL case study at Conference for Energy Choices 2005 (UK)	х	x	х	•			200	UK	RAPHAEL case study presented on conference exhibition	http://www.bnes.com/frames.htm
Conference	11-14 Dec 2005	Versailles (FR)	D.Buckthorpe (NNC)	RAPHAEL case study at a stand in ENC-2005 (European Nuclear Conference)			Х		•			EU25	RAPHAEL case study leaflet on NNC's stand	http://www.sfen.fr/enc2005/
Journal	Dec. 05	Paris	D.Hittner (FANP) / V.Chauvet (STEP)	Article on RAPHAEL in "NZ Petit Journal", Areva's internal HTR journal			X				250	FR, DE, US		
Press	Dec. 05	Brussels	Journalist	Article in ATHENA, Wallonia's RTD monthly publication	x	x			X	x	28 000	BE	Following CER-2005	http://recherche- technologie wallonie.be/xml/docfr-IDC- 1657-IDD-2923-PROFILhtml
Press	Dec. 05	EU	D.Hittner (FANP)	Publitorial on RAPHAEL in "Brussels Political User Guide"	Х							EU25	Sent to EU officials	
Press	15 Feb 06	Amsterda m	A. van Heek, J. van der Laan (NRG)	RAPHAEL cited in article of Dutch weekly magazine Elsevier								NL	Focus on nuclear hydrogen production	http://www.elsevier.nl/nieuws/wetenschap /nieuwsbericht/asp/artnr/86787/index.htm I
Publication	16 Feb 06	Brussels	D.Hittner (FANP), V.Chauvet (STEP)	"RAPHAEL - High Temp Reactor: Small size, Big potential" Project Presentation in EC's "Euratom Research Projects and Training Activities - Vol. II"	x	x	Х		Х	х	Several 1000s	EU25		http://europa.eu.int/comm/research/energ y/fi/fi_pubs/article_1186_en.htm
Conference	13-16 March 06	Luxembou rg	D.Hittner (FANP)	General presentation of RAPHAEL at FISA-2006	X		Х				400	EU25	Related topics also presented at a Post-FISA Workshop.	http://www.cordis.lu/fp6- euratom/ev_fisa2006_en.htm All presentations are also available on RAPHAEL website
Journal	15 March 06	EU	V.Chauvet (STEP)	Issue of the first RAPHAEL Journal	Х	Х	Х			Х	1 000	EU25	Email distribution (270) and hard copies (800)	Available on RAPHAEL website
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Meeting	10 May 06	Brussels	D.Hittner, E.Bogusch (ANP)	Presentation at EURATOM Coordination meeting	X		Х				EU25		
Conference	4-8 June 06	Reno, USA	M.Fütterer (JRC-IE)	Abstract submitted for paper at ICAPP-2006 (International Congress on Advances in Nuclear Power Plants)		Х	Х				INT		http://www3.inspi.ufl.edu/icapp06/
Conference	13-16 June 06	Lyon	D.Verrier (ANP)	Poster at WHEC-2006 (World Hydrogen Energy Conference)	х	Х			x		INT	Poster on RAPHAEL, linked with presentation by HYTHEC- STREP	http://www.whec2006.com
Conference	1-4 Oct 06	RSA	D.Hittner, E.Bogusch, D.Besson (ANP), J.Pirson (TE), D.Buckthorpe (NNC)	Abstracts submitted for papers at HTR-2006 international conference			x				INT		<u>http://www.htr2006.co.za</u>
Course	TBD	Cadarache	W.Scheuermann (IKE)	Eurocourse on HTR technology		•	х			х	EU25	First of 3 seminars organised in the frame of the RAPHAEL project	