



Second Annual Project Report

Deliverable D4.3

February 2010 – January 2011

March 15, 2011

1 Table of Contents

Contents

1	Table of Contents	2
2	Executive Summary	3
3	Activities	4
	3.1 EHR-Q TM Workshops	4
	3.1.1 Number of Workshops	4
	3.1.2 List of the Workshops	5
	3.1.3 Content of the Workshops Year 2	5
	3.1.4 Relevant issues brought forward by the attendees.....	7
	3.2 EuroRec Seal Level 1 and EuroRec Seal Level 2.....	8
	3.2.1 The concept of Level 1 and Level 2.....	8
	3.2.2 Upgrading the content of the Seals.....	8
	3.2.3 Translating the Seals	9
	3.2.4 Granting the Seal to market products	9
	3.2.5 Elaborating the procedures and test documentation.....	9
	3.3 Translation efforts by the partners	11
	3.4 Validation of the EuroRec Statements	12
	3.5 EuroRec Statements Repository Maintenance and Progress.....	13
	3.5.1 Fine Grained Statements.....	13
	3.5.2 Definitions.....	14
	3.5.3 Comments and Interpretations	15
	3.5.4 National Variants.....	16
	3.6 EHR Market Overview	16
	3.6.1 Market Overview - Suppliers.....	17
	3.6.2 Market Overview – Other Stakeholders	21
	3.6.3 Market Overview – Exploitation.....	22
	3.7 EuroRec Conference – Barcelona	25
	3.8 EuroRec Annual Conference – Tallinn.....	25
	3.9 EHR-Q TM Consortium Meetings	26
	3.9.1 Consortium Meeting, Tallinn, June 17, 2010	26
	3.9.2 Consortium Meeting, Sofia, December 9 – 10, 2010	28
	3.10 Documentation for the Workshops Year 3.....	29
4	Success Indicators	31
	4.1 Number of workshops.....	31
	4.2 Number of attendees at the workshops.....	31
	4.3 Representativeness of the attendees	32
	4.4 Number of attendees at the EuroRec Conference.....	32
	4.5 Number of countries deciding to implement certification.....	32
	4.6 Conclusions and action plans defined during the workshops.....	34
	4.7 Number of applications granted with a EuroRec Seal.....	34
5	Problems and Remedies	35
6	Expectations for Year 3	36

Figures

Figure 1 Accessing the Seal through the EuroRec Web Site	9
Figure 2 Registration Form to access the EuroRec Seal	10
Figure 3 Form "Request for the Seal"	10
Figure 4 Select the language beneath the screen to translate	14
Figure 5: Serbian Rulebook	33
Figure 6: Extract of page 6 of the Serbian Rulebook	33

Tables

Table 1 Planned and yet organised workshops	5
Table 2 List of National EHR-Q TM Workshops	5
Table 3 Overview of the translations	12
Table 4 Totals for the different overviewed EHR markets	17
Table 5 Suppliers per country per domain of application	18
Table 6 Applications per domain per country	19
Table 7 Cross Border Applications in use per domain per country	20
Table 8 Authorities and Stakeholders per type per country	22
Table 9 EuroRec Conference Agenda – Tallinn 2010	26
Table 10 Agenda Consortium Meeting in Tallinn	27
Table 11 Attendees Tallinn Meeting	27
Table 12 Agenda Consortium Meeting Sofia	28
Table 13 Attendees Consortium Meeting Sofia	29
Table 14 Attendees to the National Workshops	31

2 Executive Summary

The EHR-QTM project made an important step towards continuity of the quality labelling and certification of EHR systems, considering that the EHR-QTM project is a Thematic Network with limited resources.

Up to 15 Seals (5 for Level 1, 14 for Level 2) were granted to date, on the basis of a commonly agreed procedure. The products are in use in Ireland (4), Denmark (1), Austria (1), Slovenia (5) and Serbia (4). 6 more products have applied for the Seal. The process of granting the Seal started for these products used in Spain, Estonia, Romania, Serbia and Hungary.

Awareness of certification has clearly increased. Several national authorities contacted EuroRec and/or the National Partners in order to progress setting up quality labelling in one way or another. High level discussions took place in Serbia, Portugal and Spain. ProRec-BE and associates are meanwhile involved in a new round of quality assessment and certification of the Belgian EHR systems for General Practitioners. EuroRec Seal Level 1 criteria are officially integrated in the Serbian national quality labelling criteria.

The EuroRec Repository of descriptive functional statements increased to 1.692 Fine Grained Statements. The number of translations of statements increased from 3.738 to 6.795 in Year 1 of the project and to 10.028 at the end of Year 2. We expect to reach nearby 15.000 translations before the end of the project.

The EHR-QTM project organised and reported 23 National Workshops during Year 2 of the project. This brings the total of National Workshops to 44. This is only two less than anticipated by this stage of the project in the Description of Work. There are no indications that we will not finally reach these 72 National Workshops. We also organised two EuroRec Congress sessions, one during WoHIT2010 and one in June in Tallinn.

The consortium conducted a successful EHR Market Overview and started to exploit that Market Overview addressing an "Open Letter" to the identified responsible authorities. The EHR Market Overview was reported in two Deliverables D3.1, part 1 with the suppliers and part 2 listing the authorities and involved stakeholders.

The consortium has started to define the Roadmap deliverable. The consortium is confident that such a roadmap will be delivered on time.

Two consortium meetings were successfully organised.

3 Activities

3.1 EHR-QTM Workshops

3.1.1 Number of Workshops

Each partner of the Consortium should organise three Workshops during the lifetime of the project, in principle one workshop per year.

The Description of Work forecasted 27 National Workshops in the Second Year of the project.

23 National Workshops were organised, slightly less than expected. The total number of Workshops organised by the partners of the project is now 44. The expected number was 46.

We need to consider that the withdrawal of France reduced the number of normally expected Workshops from 46 to 44. No activities were developed, at least regarding organising a Workshop, by the Lithuanian partner, as the Contract Amendment is still pending.

Some of the Workshops on the other hand, organised during Year 2 of the project, should be considered as congresses (national or regional) organised by the EHR-QTM partner, with very important attendance of decision making national (and regional) health authorities. These conferences are important for bringing the message to the decision makers.

Important workshops organised as symposia were:

- Zagreb, Croatia, September 17
- Lodz, Poland, September 28
- Tallinn, Estonia, October 18
- Lisboa, Portugal, November 25
- Alcorcon – Madrid, December 16

Overview of the workshops held versus those intended:

	Q1 4/09	Q2 7/09	Q3 10/9	Q4 1/10	Q5 4/10	Q6 7/10	Q7 10/ 10	Q8 1/11	Q9 4/11	Q10 7/11	Q11 10/ 11	Q12 1/12	Tot.
--	------------	------------	------------	------------	------------	------------	-----------------	------------	------------	-------------	------------------	-------------	------

National Workshops Planned	-	6	6	7	7	7	6	7	7	6	7	6	72
National Workshops Reported / Announced		4	4	13	4	2	7	10					44
									3				3

Table 1 Planned and yet organised workshops

3.1.2 List of the Workshops

<i>Number</i>	<i>Date</i>	<i>Location</i>	<i>Country</i>	<i>Deliverable</i>
WS22	2009.06.23	Dublin	Ireland	D3.2
WS23	2009.11.26	Veldhoven	Nederland	D3.2
WS24	2010.02.25	Marousi	Greece	D3.2
WS25	2010.04.17-18	Nicosia	Cyprus	D3.2
WS26	2010.05.21	Luxembourg	Luxembourg & Belgium	D3.2
WS27	2010.07.15	Samos	Greece & Cyprus & Germany	D3.2
WS28	2010.07.05	Timisoara	Romania	D4.1 - I
WS29	2010.08.02	Sofia	Bulgaria	D4.1 - I
WS30	2010.09.17	Zagreb	Croatia	D4.1 - I
WS31	2010.09.28	Lodz	Poland	D4.1 - I
WS32	2010.10.14	Tallinn	Estonia	D4.1 - I
WS33	2010.10.14-15	Tatranska Lomnica	Slovakia	D4.1 - I
WS34	2010.10.20	Den Haag	Nederland	D4.1 - I
WS35	2010.11.04	Aalborg	Denmark	D4.1 - I
WS36	2010.11.09	Belgrade	Serbia	D4.1 - I
WS37	2010.11.23	Oslo	Norway	D4.1 - I
WS38	2010.11.25	Lisboa	Portugal	D4.1 - I
WS39	2010.11.30	Roma	Italy	D4.1 - II
WS40	2010.12.01	Türi-Alliku	Estonia	D4.1 - II
WS41	2010.12.16	Madrid	Spain	D4.1 - II
WS42	2010.12.17	Wien	Austria	D4.1 - II
WS43	2011.01.21	Praha	Czech Republic	D4.1 - II
WS44	2011.01.26	Sint Martens Latem	Belgium	D4.1 - II

Table 2 List of National EHR-QTM Workshops

3.1.3 Content of the Workshops Year 2

The Year 2 Workshops were intended to validate the EuroRec Repository of descriptive functional statements, more especially the EuroRec Seal Level 2 set of statements and an additional set, mostly related to medication management.

The Workshops of the first six months were still, the Luxembourg Workshop excepted, focusing on general discussions and the promotion of quality labelling and certification in general.

We have delivered over the next six months a mixture of "traditional" more large public oriented presentations related to "certification in general" and the originally planned Year 2 workshops on "validation of the criteria".

A template was produced to assist and to streamline the validation process and reporting.

Another template to validate more specifically the EuroRec Seal Level 2 has been made available too.

The participants in the validation workshops were also asked to give their opinion on the following aspects:

1. Formulation of each statement
2. Content of each statement
3. Completeness of the set
4. Technical correctness of the statements
5. Importance of each statement
6. Feasibility.

Each of these concepts has been defined in the appropriate workshop report template made available on the EHR-Q^{TN} website.

The appropriate templates are available on the web site:

http://www.eurorec.org/consortium_intern/EHR-Q/index.cfm

The templates are in English, including the English version of the statements to be validated. The partners used "national" versions of these templates with the statements either in their own language or in both English and their national language. Examples are e.g. the Luxembourg and the Portuguese Workshops.

3.1.4 Relevant issues brought forward by the attendees

Comments and suggestions brought forward by the attendees to the Workshops were reported in the Deliverables D3.2, D4.1 part I and D4.1 part II.

A distinction is made between more general comments on quality labelling as such and the procedures, comments related to the Seal and comments related to individual Fine Grained Statements.

An "answer" was formulated where relevant and possible.

Deliverable D3.2 reported 5 general comments. Deliverable D4.1 reported 13 new general comments and suggestions on certification and on procedures regarding the EuroRec Seal and the conditions to obtain such a Seal.

The comments and suggestions regarding individual statements as well as regarding the EuroRec Seal per se are documented in Deliverable D4.4 "Validation of the EuroRec Statements and EuroRec Use Tools".

Comments and suggestions formulated during the workshops and related to individual descriptive statements are

- Either included in the specific Q&A section on the EuroRec web site
- Or added as comment to individual Fine Grained Statements
- Or both, listed on the web site and added as comment
- Or simply responded to within this deliverable and made available to the partners of the EHR-Q^{TN} project.

3.2 EuroRec Seal Level 1 and EuroRec Seal Level 2

3.2.1 The concept of Level 1 and Level 2

EuroRec defined, supported by the EHR-Q™ partners, the concept of a EuroRec Seal as a cross border "quality label".

Products across the continent that meet a set of base-line functional requirements can apply for such a Seal. The functional criteria tested are the same for every country. This means that all these products are "comparable", at least regarding the tested functions.

The first set encompassed 20 criteria, mainly focusing on reliability and trustworthiness of the content of an EHR and generic properties of the data (elements). The set was named "EuroRec Seal 2008-2009".

A second set was defined at the end of 2009, containing up to 50 different criteria, addressing, on top of the previous set, also clinical functionality, display aspects as well as privacy and accountability services. The set was named "EuroRec Seal 2010" and very quickly modified in "EuroRec Seal 2010-2011".

These dated sets have the disadvantage of being "dated". No one will apply in 2011 for a Seal dated 2008-2009 anymore.

The consortium decided to go on with offering the choice to the supplier to supply to either the one or the other Seal. The consortium therefore agreed to rename the sets in "EuroRec Seal Level 1" and "EuroRec Seal Level 3".

3.2.2 Upgrading the content of the Seals

The content of the Seal is very stable. This does not mean that changes aren't possible over time.

We distinguish two different types of changes:

- Modifications or upgrades of yet to be included statements.
This is documented in the Deliverable D4.4. The EuroRec Use Tools, more especially the Documenter™, offers such a function.
- Changes in the composition, the EuroRec Seal Basket.
Some statements are not so easy to validate in a test session. Some statements are "discussed" during test sessions, while there are sufficient valuable statements to be included in an updated version of the EuroRec Seal.

This is very difficult issue because even slightly changing the composition is reducing comparability between the applications that were previously granted a Seal.

The discussion will be finalised during the next Consortium meeting in Lisboa, June 17-18, 2011.

3.2.3 Translating the Seals

The statements included in Seal Level 1 or in Seal Level 2 were translated “as a priority” in all the languages represented in the consortium.

The Lithuanian translations are expected as soon as the Contract Amendment can be finalised.

3.2.4 Granting the Seal to market products

Effective testing of market products was done during Year 2.

Ten Market Products were granted a EuroRec Seal Level 2 while five products were granted the EuroRec Seal Level 1. The products are used in five different countries.

The 4 Irish products were granted a EuroRec Seal Level 1, as documented in the previous annual report, on the basis of an agreement with the GP.IT group, responsible for a National Certification Procedure.

The other products were effectively tested by EuroRec and/or the National Partners within the EHR-QTM project, based on an agreed procedure between the partners and involving the EHR-QTM network.

3.2.5 Elaborating the procedures and test documentation

A ‘default’ procedure was elaborated and validated in the past year.

The procedure will be fully documented in Deliverable D6.2 “Report on the validation of the EuroRec Certification Procedure and Quality Assurance Scenarios”.

The procedure was partially described in Deliverable D4.4 and is summarised as follows:

1. The candidate requests access to the Seal composition by completing a form to register.

The screenshot displays the EuroRec EHR Quality Seal website. On the left, a list of awarded seals includes HELIANT PHC, HELIANT HIS, and BIRPPIS21, each with a date and location. The main content area features the title 'The EuroRec EHR Quality Seal' and a detailed description of the seal's purpose and rules. Below the description is a link to 'Seal Level 1'. On the right side, there are two boxes: 'Q&A' with a link to 'Q&A' and 'Registration' with a link to 'Complete form'.

Figure 1 Accessing the Seal through the EuroRec Web Site

EuroRec Seal and Certification Criteria: registration

Registration form to get to know more about the Seal Level 1 and 2 and the functional criteria behind.

Please note that fields marked with * are mandatory.

Prefix *: ▼

First Name *:

Last Name *:

Email *:

Organisation *:

Address *:

Zip code *: City *:

Country *:

Please explain your interest in the EuroRec Certification Criteria *:

Figure 2 Registration Form to access the EuroRec Seal

2. The applicant confirms his interest by completing an application form for each of the products to be tested.



REQUEST for the EuroRec Seal - Seal Level 2 - Supplier Form

This form needs to be completed and signed by the supplier requesting a EuroRec Seal for an application.

The application can be a "complete EHR system" with a complete set of functions (as described in the criteria) and a user interface.

One request is completed for each version to be tested and/or for each country where a version will be marketed.

Figure 3 Form "Request for the Seal"

3. EuroRec informs the National Partners (a ProRec centre or an Associated Member of EuroRec). The applicant may prefer not to inform the National Partner. The role of that National Partner is then fulfilled by EuroRec centrally.
4. The applicant needs then to produce convincing documentation, including screen captures. The documentation needs to be at least also in English. The screen captures might be in the original language.
5. The National Partner and the Applicants agree on the conditions of assistance provided by the National Partner in preparing the documentation and simulation for the test scenarios.
6. EuroRec needs to approve the documentation as sufficiently convincing. The National Partner will assist EuroRec in doing so. That usually includes pre-testing done by the National Partner.

The process does not proceed where the pre-testing does not indicate a sufficient chance for a successful final test. Several pre-tests are possible and to be agreed with the National Partner.

7. An appointment is made to test the application, based on the scenarios. The tests are evaluated by EuroRec as the central organisation or by a National Partner. The National Partner doing the final test session cannot be the National Partner assisting the applicant as described under 5.
8. EuroRec grants or does not grant the Seal depending on the results.

3.3 Translation efforts by the partners

Translations efforts were remarkable, at least for some of the partners. Up to 3.027 new translations were provided during that second year of the project. This brings the number of new translations during the lifetime of the project on 6.260 new translations.

The total number of available translations is now 10.028 translations.

The partners were requested to translate – first – the following statements:

- EuroRec Seal Level 1 and Level 2 statements
- Statements related to generic attributes of EHR data, more especially related to trustworthiness of data and reliability of the applications (A09)
- Statements related to medicinal product prescriptions (A10)
- Statements related to patient summaries (A14)
- Statements related to privacy and to access management

Please find hereby a table with:

- Number of Fine Grained Statements translated per January 31st 2010.
- Number of Fine Grained Statements translated per January 31st 2011.
- Number of Fine Grained Statements translated during Year 2.
- Number of Good Practice Requirements translated per January 31st 2010.
- Number of Good Practice Requirements translated per January 31st 2011.
- Number of Good Practice Requirements translated during Year 2.
- Total number of translations during Year 2.

Translation of Good Practice Requirements was not specifically required.

EuroRec statements now exist in 19 different European languages.

	FGS 10	FGS 11	New FGS	GPR 10	GPR 11	New GPR	Total in Year 2
Bulgarian	325	348	23	91	92	1	24
Croatian	98	177	79	45	48	3	82
Czech	20	57	37	0	0	0	37
Danish	121	150	29	32	32	0	29
Dutch	521	598	77	123	145	22	99
Estonian	374	1686	1312	116	179	63	1375
French	394	469	75	98	98	0	75
German	259	286	27	62	62	0	27
Greek	130	201	71	34	42	8	79
Hungarian	275	295	20	69	78	9	29
Italian	319	344	25	131	144	13	38
Polish	116	116	0	15	15	0	0
Portugese	109	110	1	0	0	0	1
Romanian	295	479	184	104	104	0	184
Serbian	342	351	9	57	57	0	9
Slovakian	1571	1569	-2	159	159	0	-2
Slovenian	188	204	16	47	47	0	16
Spanish	36	1131	1095	119	155	36	1131
	5493	8571	3078	1302	1457	155	3233

Table 3 Overview of the translations

The efforts done by the Estonian and the Spanish partners are remarkable and encouraging. We have now three languages with more than 1.000 statements translated: Estonian, Slovakian and Spanish.

Three partners did not do any additional effort in Year 2. One of them is understandable. They translated the complete set of statements during the first year of the project.

An effort will be required for the third year to translate at least the selection previously listed before the end of the project.

3.4 Validation of the EuroRec Statements

The validation efforts are documented in Deliverable D4.4.

Validation of the original statements is done in different ways:

1. Collecting comments from "experts" accessing on individual basis the Repository and more especially the EuroRec Seals.
2. Collecting comments from the translators.
3. Specific Workshops validating selected sets of statements on formulation, content, completeness, technical correctness, importance and feasibility of each individual statement. This validation is done by suppliers.
4. Using the EuroRec Seal Statements for real life quality assessment of market products.

Some of the conclusions of the validation workshops are copied here.

The EuroRec Seal Level 2 has 50 statements.

No remarks were made by 57,33% of the participants regarding the formulation of the statements. Another 25,61% considered one of the statements not well formulated.

Even better figures are obtained for the content. 74,33% of the participants considered the content of all the statements as OK while 18,67% estimated the content of one single statement as not OK.

The average score for importance was 4,03 on a scale from 0 to 5, with figures per country varying between 3,37 and 4,59.

The average score in years for feasibility was 1,39. This means that all the statements of the Seal seem feasible within a period of 17 months. There are nevertheless big differences between the countries with scores from 0,32 (4 months for Belgium) to 3,03 (36 months for Bulgaria), clearly indicating differences in maturity of the markets.

Other validation sets (generic data attributes: A09 and medication selection: A10.0) with in average 80 statements resulted in similar scores.

No remarks were made by 57,41% of the participants regarding the formulation of the statements. Another 25,33% considered one of the statements not well formulated.

The figures for the content are slightly less good than for the EuroRec Seal. 62,53% of the participants considered the content of all the statements as OK while 22,49% estimated the content of one single statement as not OK.

3.5 EuroRec Statements Repository Maintenance and Progress

Maintenance of EuroRec Statements was and is another ongoing important activity of the partners, formulating comments and suggestions.

3.5.1 Fine Grained Statements

The number of Fine Grained Statements increased, per February 2011, from 1621 to 1692.

79 new statements were added, while 8 statements were removed.

Two events in which EuroRec and the ProRec centres participated resulted in adding most of the new statements:

- The 2010-2011 Quality labelling of the Belgian EHR systems for General Practitioners.
- The cooperation with the HITCH¹ project where a cross project domain of validation has been defined: lab results management. This was an opportunity to include some specific Austrian functional requirements² as referenced statements and to translate them into Fine Grained Statements.

¹ HITCH project: Healthcare Interoperability Testing and Conformance Harmonisation. FP5-ICT-2009-4

² ÖGKLMC: Österreichische Gesellschaft für Laboratoriummedizin und Klinische Chemie

Two or three statements were added by splitting a previous Fine Grained Statement, based on comments formulated during the validation sessions.

The eight statements removed were considered as "near duplicates" of other statements.

It is surely possible to spend more resources on completing the repository with other referenced statements, defining new linked Fine Grained Statements and increasing the number of Good Practice Requirements, if these resources become available.

3.5.2 Definitions

A new function was added to the "Dictionary": the possibility to translate a definition. This function is illustrated with some pictures

Dictionary - Edit

The screenshot shows the 'Dictionary - Edit' interface. At the top, the term is 'post-it' function. Below this, there is a note: 'In case plural has been used, please correct into singular.' The term is entered in a text box, and there are 'Save' buttons. On the right, there are fields for 'Abbrevia' and 'Status fir' with a 'Save' button.

The main area is split into two columns. The left column is titled 'Definitions for the selected term' and contains a definition: '1a reminder function within an EHR system or practice management system, not mandatory related to a given patient. Last update: 05/11/2009'. There are 'Edit' and 'Delete' buttons next to the definition.

The right column is titled 'Add a definition for the selected term'. It has a 'Definition:' label and a rich text editor with a toolbar (bold, italic, list, link, unlink, help). Below this are fields for 'EuroRec Definition:', 'Reference:', 'Reference URL:', and 'Comment:', each with a corresponding rich text editor. At the bottom of this column are 'Save', 'Save & Back to grid', and 'Reset' buttons, and a 'Cancel' button at the very bottom.

At the bottom of the interface, there is a 'Translate to:' section with links for '- nl' and '- fr'.

Figure 4 Select the language beneath the screen to translate

Dictionary - Edit

Translations to Dutch

Term: "post-it" function

Definitions for the selected term

1 a reminder function within an EHR system or practice management system, not mandatory related to a given patient.
Last update: 05/11/2009

de mogelijkheid om in een EMD of praktijk management systeem een "ruiter" aan te brengen om aan iets te herinneren, zonder dat dit noodzakelijk gekoppeld is aan een individuele patiënt.

www.eurorec.org [Email EuroRec](#) [Terms of Use/Contact](#) April 30, 2010

The possibility to add "definitions" to the Repository was agreed on and implemented more than a year ago. The functionality was documented in the previous Annual Report.

Collecting and gaining even more agreement on these definitions is more than a project on its own. One of issues is surely that some of these definitions were not considering nor intended to be used in the very specific domain of application, being the EHR systems functionality descriptions.

111 concepts are still identified as 'requiring a definition'. Only 13 definitions were provided.

Definitions might, finally, not be the main issue. What users of the repository want is to know what a functional criterion means in real life, in a running EHR system. EuroRec therefore decided to make use of the possibility to link an "interpretation" statement to each individual Fine Grained Statement and also to the Good Practice Requirements/

3.5.3 Comments and Interpretations

The way comments are handles and the concept / management of "interpretations" has been largely documented in Deliverable D4.4 on the Validation of the Statements.

Comments are collected from outside and handled centrally, mostly resulting in an improvement of the statement or in an additional comment.

We have actually 76 statements with a comment.

Interpretations are appended centrally and intended to explain how an application may comply with the statement. Interpretative statements are very useful for the supplier when preparing for the EuroRec Seals.

We have actually 61 interpretations available, with an interpretation added to each statement of the EuroRec Seal Level 1.

Doing the same for Level 2 is one of our priorities for future months.

3.5.4 National Variants

Another new, very recently developed function is the possibility to define "National Variants" of some statements. The why and the how were documented and illustrated in Deliverable D4.4.

Hereby some important issues regarding the "National Variants":

- National Variants are only intended to specify a Fine Grained Statement, to be more specific on some issues. They should never "differ" from the original EuroRec Statement.

Some EuroRec criteria stipulate that a given function (e.g. printing of a medicinal product prescription or prevention management system) should meet local legal and/or regulatory requirements.

A National Variant enables an authority, or a local partner to precise the law or the guideline to be followed / implemented.

- National Variants can be defined in each of the local languages, but only after producing an English version of the National Variant.
- We did not foresee so far any "regional variants" or multiple national variants.

3.6 EHR Market Overview

The EHR Market Overview was the main challenge for the past year. It was not at all an easy task to get information from all these countries, considering:

- that we needed to address three different groups of shareholders, not always so easy to identify: the *responsible authority/authorities* if they existed, the "interested users", user groups and domain expert and the suppliers.
- that centralised information is rarely available on the market, on the suppliers and even more on their market shares. Market shares frequently exceed 100% of the market. It also happens that this information is treated as "top secret" or commercial in confidence when it does exist.
- that most of the available information seems to be related to administrative and billing systems.
- that to conduct such a survey specialised commercial (consulting) entities are granted several thousand € per country.

The consortium is nevertheless proud with the result, despite all these obstacles and resources issue.

We certainly did not list all the applications on the market and issued therefore a disclaimer.

We are nevertheless confident that a large part of the market is covered by this overview, most probably nearby 90% of the different domain specific national markets.

The collection of the data was done by using a standard template available to the consortium members.

The Deliverable was split in two parts: Part I listed the suppliers and their organisations, Part II listed all the other stakeholders and more especially the authorities.

The National Market Overviews are available on the web site : http://www.eurorec.org/consortium_intern/EHR-Q/index.cfm and then Documents / Deliverables / Del3.1 National Market Overview and select the country you are interested in.

3.6.1 Market Overview - Suppliers

The main markets studied are the market for the GP Information Systems and for the Hospital Information Systems.

The consortium listed in total 1.042 IDs and addresses of products and/or services with their supplier:

- 849 commercial EHR systems for GP's, Hospitals, Home Care and Home Nursing, paramedical mainly physiotherapy systems as well as dental systems.
- 27 in-house developed hospital information systems
- 122 "technical" services, e.g. telematic services, privacy enhancing services etc... and their service providers
- 44 eHealth / Health IT organisations representing several / the national industrial partners involved

There are big differences between the countries, some countries not reporting any GP Information System (Poland, Cyprus) other reporting a huge number of mainly administrative and billing systems (Germany).

The next table provides a general overview.

	GP	Hospital	Home / Nursing	Para-medical	Dental
Suppliers	240	262	87	73	60
Applications	290	320	91	87	61
Applications/Supplier	1,2083	1,2214	1,0460	1,1918	1,0167
International Applications	26	102	8	11	9
Intern./National Applicat.	8,97%	31,88%	8,79%	12,64%	14,75%
Countries Reported	22	24	17	14	15
Average Applic. / Country	13,18	13,33	5,35	6,21	4,07
Average Supplier/Country	10,91	10,92	5,12	5,21	4,00
Average Internat. Applic.	1,18	4,25	0,47	0,79	0,60

Table 4 Totals for the different overviewed EHR markets

Some lessons from this table:

- The number of “International” applications is rather limited and only important for Hospital systems. International means either used in more than one European country or belonging to an entity based outside the country of use.
- The average number of suppliers and applications is significantly higher for the physicians, compared to the other medical professions.
- The rule is still one application per supplier, with a few exceptions in the GP market and more exceptions in the hospital market.

Next table illustrates the number of suppliers per country per domain of application.

	Suppliers					
	GP	Hospital	Home / Nursing	Para-medical	Dental	Total
Austria	40	20	0	1	7	68
Belgium	17	8	25	19	4	73
Bulgaria	6	3	0	0	0	9
Croatia	7	1	0	0	6	14
Cyprus	0	3	1	0	1	5
Czech Republic	4	8	3	1	1	17
Denmark	17	8	4	16	12	57
Estonia	3	5	1	1	0	10
Germany	43	10	0	0	0	53
Greece	17	25	4	1	7	54
Hungary	3	6	3	0	3	15
Ireland	5	8	1	3	0	17
Italy	10	38	5	0	1	54
Luxembourg	6	5	2	2	0	15
Netherlands	6	21	12	5	0	44
Norway	3	7	3	5	1	19
Poland	0	7	0	0	0	7
Portugal	12	11	0	0	0	23
Romania	9	6	1	0	3	19
Serbia	3	3	0	0	0	6
Slovakia	11	14	2	2	4	33
Slovenia	5	5	1	1	1	12
Spain	8	24	10	6	4	52
United Kingdom	5	16	9	10	5	45
Total	240	262	87	73	60	722

Table 5 Suppliers per country per domain of application

And the number of listed applications

	Applications					
	GP	Hosp.	Home / Nursing	Paramed	Dental	Total
Austria	44	22	0	1	7	74
Belgium	21	18	27	24	4	94
Bulgaria	6	3	0	0	0	9
Croatia	7	1	0	0	6	14
Cyprus	0	3	1	0	1	5
Czech Republic	6	7	3	1	1	18
Denmark	17	8	4	22	12	63
Estonia	3	5	1	1	0	10
Germany	60	15	0	0	0	75
Greece	17	25	4	1	8	55
Hungary	3	6	3	0	3	15
Ireland	5	8	1	3	0	17
Italy	14	42	5	0	1	62
Luxembourg	6	5	2	2	0	15
Netherlands	10	25	12	5	0	52
Norway	8	15	3	8	1	35
Poland	0	10	0	0	0	10
Portugal	13	13	0	0	0	26
Romania	12	7	1	0	3	23
Serbia	3	3	0	0	0	6
Slovakia	11	17	2	2	4	36
Slovenia	5	5	1	1	1	13
Spain	10	35	10	6	4	65
United Kingdom	9	22	11	10	5	57
Total	290	320	91	87	61	849

Table 6 Applications per domain per country

Another interesting overview is that about the use of cross border or “international” applications.

The countries with many such applications are the United Kingdom, Spain, Italy, Denmark and Austria (top 5).

We identified 6 “international” suppliers active in primary care and 19 “international” suppliers in hospital care.

	Cross Border / International Applications					
	GP	Hospital	Home / Nursing	Para-medical	Dental	Total
Austria	4	6	0	0	2	12
Belgium	1	7	0	0	0	8
Bulgaria	0	0	0	0	0	0
Croatia	0	0	0	0	0	0
Cyprus	0	2	0	0	0	2
Czech Republic	3	1	1	0	1	6
Denmark	2	4	1	6	1	14
Estonia	0	0	0	0	0	0
Germany	0	5	0	0	0	5
Greece	0	0	0	0	0	0
Hungary	0	2	0	0	0	2
Ireland	0	6	0	0	0	6
Italy	3	11	0	0	1	15
Luxembourg	0	5	1	0	0	6
Netherlands	1	8	1	0	0	10
Norway	0	3	0	0	1	4
Poland	0	1	0	0	0	1
Portugal	3	2	0	0	0	5
Romania	1	1	0	0	0	2
Serbia	0	0	0	0	0	0
Slovakia	1	5	1	1	2	10
Slovenia	0	0	0	0	0	0
Spain	4	18	0	0	0	22
United Kingdom	3	15	3	4	1	26
Total	26	102	8	11	9	156

Table 7 Cross Border Applications in use per domain per country

We finally listed 89 suppliers across Europe providing and supporting at least in one country applications for more than one target market.

3.6.2 Market Overview – Other Stakeholders

The consortium first defined the criteria necessary to include a stakeholder or an organisation or an institute or an authority into the list of important stakeholders regarding the use of EHR systems:

- *Do they actually have an active role in quality assurance of EHR systems, if any in the country?*
- *Did they manifest a particular knowledge of the domain (certification / quality labelling) in the past?*
- *Is their approval or at least their cooperation essential in order to introduce successfully certification and quality labelling of EHR systems?*
- *Is there a risk of obstruction not including them in the process of certification and quality labelling?*
- *Are they representative or an important party in the particular EHR market, addressing a specified group of users?*

For each of the stakeholders included we collected, if available with a reasonable effort:

- Original name and English Name (sometimes only the English name has been collected);
- If relevant and available a department or section of the organisation or institute or a department of a public agency with a specific focus on eHealth;
- The address, including web site and a contact e-mail address;
- A contact person with his or her function in the organisation;
- A phone number (eventually also the fax number) related to the contact person or the public relations service of the organisation;
- A description of the main activities and their overall role in the health and healthcare community, not necessarily related to EHR systems or even to medical informatics and/or eHealth;
- Finally their actual or potential role regarding EHR systems as well as related to their quality labelling and certification.

The consortium collected 663 different “important stakeholders” across the 24 countries involved in the project.

The next table provides an overview of the number of stakeholders listed per type of stakeholder and per country.

	Authorities	Healthcare Insurance	Public Health Org.	Research Inst.	Health Care Inst.	Profess. Org.
Austria	7	2	1	21	12	7
Belgium	5	3	2	5	6	20
Bulgaria	2	16	1	2	2	6
Croatia	1	4	1	6	4	7
Cyprus	1	2	2	3	-	3
Czech Republic	2	8	1	3	2	6
Denmark	6	2	1	1	-	3
Estonia	4	2	1	2	1	8
Germany	18	5	8	6	5	9
Greece	14	1	1	12	16	8
Hungary	2	1	2	-	19	5
Ireland	3	3	-	9	2	6
Italy	26	1	4	2	2	5
Lithuania	1					
Luxembourg	1	3	1	2	2	6
Netherlands	3	1	-	2	2	12
Norway	2	1	1	2	4	7
Poland	7	2	4	6	12	6
Portugal	2	3	2	4	2	6
Romania	2	6	1	4	4	7
Serbia	1	1	1	2	5	4
Slovakia	3	6	1	4	1	8
Slovenia	1	4	1	2	3	8
Spain	19	8	-	12	6	9
England (UK)	2	2	2	2	2	8

Table 8 Authorities and Stakeholders per type per country

3.6.3 Market Overview – Exploitation

One of the important challenges for Year 3 of the project will be to use the Market Overview, by contacting the authorities, important stakeholders and more especially the suppliers, to promote Quality Assessment and Certification of the applications on the European Market.

The consortium started by editing a letter to be send to the identified health authorities of each of the countries. The letter is translated in each of the national languages and co-signed by the national partner.

A second letter will be send to all the suppliers across the continent in order to promote the Seal Level 1 and possibly Level 2.

The letter...

“

Dear Sir,
Dear Madam,

Health IT has a great potential to increase the quality of care by improving the availability of shared and interoperable patient records, by enabling evidence-based disease management and by offering integrated knowledge-based clinical surveillance and decision support. At the same time health IT enables increased efficiency of care and reduction of costs.

Effective use of high quality Electronic Health Record (EHR) applications is a prerequisite to realise added value. The quality of the available EHRs is very variable and sometimes poor, not always offering what they promise.

Functional quality labelling and subsequent certification is the only way to ensure reliability and trustworthiness of systems, and to confirm that at the same time systems behave as nationally or regionally required by the authorities. Quality labelling is not yet common practice in the whole Europe. Establishing consistent quality labelling will enforce and ensure the benefits of the effective use of health IT.

Functional system quality is preparatory and complementary to interoperability and data exchange validation. Systems (and users) need to 'produce' high quality content before being able to 'exchange' that quality.

The EuroRec Institute and its national partner organisations in 24 European countries developed a repository of descriptive functional statements considering European specificity and global standards. EuroRec developed on top of this repository a set of services that will enable you to initiate and to direct a quality labelling and certification process in your country, addressing different domains of application (patient summaries, ePrescription, secondary use of patient data, specialised care...).

EuroRec also defined, using a consistent cross-border approach, minimal quality criteria to be met by each application handling patient and care related data: the EuroRec Seals.

EuroRec and its national partner organisations, joined in the E.U. funded Thematic Network project EHR-QTM (CIP-ICT PSP-238912), offer information and assistance in setting-up a quality labelling process or aligning your national or regional initiative with European efforts.

Investing in quality is urgent and essential to get a return on your efforts to improve quality of care and essential to support the European health IT industry in an increasingly global health IT market.

Visit the EuroRec web site (www.eurorec.org) and access the repository of functional statements in English and in your national language in order to see the scope of the work to date.

Yours Sincerely,

“

And as example, the Czech version of the letter

“

V Praze dne 31.3.2011

Vážený pane,
vážená paní,

informační technologie ve zdravotnictví mají velký potenciál pro zvýšení kvality a bezpečnosti zdravotní péče díky zlepšení dostupnosti sdílených a interoperabilních záznamů o pacientovi, umožnění léčebného managementu založeného na podkladech a nabídce uceleného, znalostmi podepřeného klinického dozoru a podpory rozhodování. Informační technologie ve zdravotnictví zároveň umožňují zvýšenou účinnost péče a snížení nákladů.

Efektivní využití vysoce kvalitních aplikací elektronického zdravotního záznamu (EHR) je předpokladem k realizaci přidané hodnoty. Kvalita dostupných EHR je velmi proměnlivá a někdy žalostná: ne vždy nabízí, co slibuje.

Známkování funkční kvality a její následná certifikace je jediným způsobem, jak zaručit spolehlivost a důvěryhodnost zdravotních informačních systémů a potvrdit, že se systémy současně chovají dle národních nebo regionálních požadavků příslušných autorit. Známkování kvality není ještě běžnou praxí v celé Evropě. Zavedení jednotného známkování kvality umožní bezpečné, efektivní a prospěšné využití IT ve zdravotnictví.

Funkční kvalita systému musí předcházet a zároveň doplňovat ověření interoperability (vzájemné srozumitelnosti) a výměny dat. Systémy (a uživatelé) musí “vyprodukovat” kvalitní obsah před tím, než si jej budou moci “vyměnit”.

Institut EuroRec a jeho tuzemské partnerské organizace ve 24 evropských zemích vyvinuly depozitář popisných funkčních požadavků zohledňující evropské specifické a globální standardy. K tomu EuroRec navíc definoval soubor služeb, které umožní i v České republice nastartovat a směřovat procesy známkování kvality a její certifikace, a které se dotýkají různých oblastí užití (pacientský souhrn, e-Preskripce, druhotné použití údajů o pacientovi, specializovaná péče...).

EuroRec také definoval v přeshraniční spolupráci minimální kvalitativní kritéria, která mají být splněna každou aplikací, která zachází s údaji souvisejícími s pacientem a zdravotní péčí: EuroRec Pečeti.

EuroRec a jeho tuzemské partnerské organizace – zapojené do projektu tematických sítí EHR-QTM (CIP-ICT PSP-238912) financovaného EU – nabízí informace a pomoc při vytváření procesu známkování kvality nebo při sbližování národních či regionálních iniciativ s evropskými snahami.

Investování do kvality je naléhavé a nezbytné k návratnosti vámi vloženého úsilí, směřujícího ke zlepšení kvality a bezpečnosti zdravotní péče a také nezbytné na podporu evropského průmyslu informačních technologií ve zdravotnictví na čím dál tím více globálním trhu s informačními technologiemi ve zdravotnictví.

Navštivte webovou stránku EuroRec (www.eurorec.org), kde naleznete přístup do depozitáře funkčních sdělení v angličtině a částečně i ve vašem rodném jazyce a kde můžete shlédnout rozsah práce vykonané až do dnešního dne.

Jménem níže uvedených představitelů EuroRec a Českého Národního Fóra pro eHealth, takto partnera v projektu Evropské komise EHR-QTM
S pozdravem

Ing. Milan Růžička, ČNFeH-ProRec CZ „

3.7 EuroRec Conference – Barcelona

The EuroRec Conference in Barcelona was organised as a parallel session (PS25) during the WoHIT 2010 Conference.

Presentations were given by:

- Prof. Dr. Georges De Moor, EuroRec: "EHR Certification, Semantic Interoperability and the Link to Clinical research".
- Prof. Dr. Dipak Kalra, UCL London: "The Role of Clinicians in Clinical Concept Modelling".
- Mr. Mats Sundgren, Astra Zeneca: "New needs for interoperability in Clinical Research".

All the presentations are available on

http://www.eurorec.org/news_events/eventsArchive.cfm?eventID=264

3.8 EuroRec Annual Conference – Tallinn

The EuroRec Annual Conference was organised in Tallinn, June 18th.

The conference is reported in Deliverable D4.2 and available on the web site of EuroRec.

We are copying here the agenda of the Conference.

Annual EuroRec Conference, 2010		
Tallinn, June 18, 2010		
Tricky Ants Farm at von Stackelberg Hotel, Toompuiestee 23, 10137 Tallinn, Eesti		
08:30 – 09:00	Registration	
International		
09:00 – 09:10	Georges De Moor, EuroRec, Belgium - Madis Tiik, Estonia	Welcome
Theme 1: Secondary Use of Healthcare Data		
09:10 – 09:40	Georges De Moor, EuroRec, Belgium	The EHR4CR Project Proposal
09:40 – 10:10	Richard Perkins, eClinical Forum, France	Expectations of the Pharma Industry regarding EHR systems
Theme 2: EuroRec approach to Quality Labelling and Interoperability		
10:10 – 10:40	Pascal Coorevits, EuroRec, Belgium	The HITCH project: cooperation between EuroRec and IHE
10:40 - 11:10	Knut Bernstein, Mediq, Denmark	EHR Certification Experience
11:10 - 11:40	Break	
Theme 3: Improving interoperability through quality and use of EHR systems		
11:40 – 12:10	Jos Devlies, EuroRec, Belgium	"Meaningful use" and EHR system quality labelling.
12:10 - 12:40	Gerard Freriks, ProRec-NL, The Netherlands	Boundaries between structuring applications and messaging
12:40 – 14:00	Lunch Break	

Theme 4: Estonian experiences		
14:00 – 14:30	Madis Tiik, Estonian eHealth Foundation, Estonia	Overview and current situation of Estonian EHR system.
14:30 – 15:00	Janek Metsallik, Estonian eHealth Foundation	Standardization Road Map in Estonia.
15:00 – 15:10	Discussion	
15:10 – 15:40	Break	
Theme 5: Regional experiences		
15:40 – 16:10	Arvydas Laurinavicius, National Centre of Pathology, Lithuania	SNOMED-CT in Lithuania
16:10 – 16:40	Teemupekka Virtanen, Finnish Ministry of Health	Overview of e-Health developments in Finland
16:40 – 17:00	Debate and Conclusions	

Table 9 EuroRec Conference Agenda – Tallinn 2010

The presentations are available on the following web address:
http://www.eurorec.org/news_events/EuroRec.cfm. Click on the appropriate link beside the name of each of the speakers.

3.9 EHR-Q^{TN} Consortium Meetings

Two Consortium Meetings were organised as foreseen in the Description of Work.

3.9.1 Consortium Meeting, Tallinn, June 17, 2010

The Fourth Consortium Meeting was organised by the Estonian Partners of the Estonian eHealth Foundation.

It was part of a two days event, the second day being the Annual EuroRec Conference.

Agenda of the meeting:

EHR-Q^{TN} Meeting		
Tallinn, June 17, 2010		
Tricky Ants Farm at von Stackelberg Hotel		
Toompuiestee 23, 10137 Tallinn, Eesti		
08:45 – 09:00	Registration	
09:00 – 09:05	Welcome	Madis Tiik, Estonian eHealth Foundation, Estonia; Prof. Dr. Georges De Moor, EuroRec, Belgium; Dr. Jos Devlies, EuroRec, Belgium
09:05 – 09:20	Roll Call of Delegates	All
09:20 – 10:10	First Project Review Result and Comments	Dr. Jos Devlies
10:10 – 10:40	Coffee Break	
10:40 – 11:15	EHR-Q ^{TN} project progress	Dr. Jos Devlies
11:15 – 11:35	Status of the Repository	Dr. Jos Devlies

11:35 - 12:30	National Reports	All
12:30 - 13:40	Lunch Break	
13:40 - 14:10	National Reports	All
14:10 - 14:40	EuroRec Seal: why and how?	Dr. Jos Devlies
14:40 - 15:10	EuroRec Seal Testing experiences	Leo Ceglencecki & Knut Bernstein
15:10 - 15:40	Coffee Break	
15:40 - 16:10	Using the EuroRec Tools	Dr. Jos Devlies
16:10 - 16:30	EHR-Q TM Success Indicators	Dr. Jos Devlies
16:30 - 17:00	EHR-Q TM Roadmap to Certification	Dr. Jos Devlies
17:00 - 17:20	Management Issues	Dr. Jos Devlies
17:20 - 17:30	Any other issue	All
17:30 - 18:00	Break	
18:00 - 20:00	Tallinn Old City Tour	
20:00 - 23:00	Dinner at the Olde Hansa Restaurant	

Table 10 Agenda Consortium Meeting in Tallinn

Participant Short Name	Attendee	COUNTRY
Pro-AT	Alexander Hörbst	Austria
EuroRec	Georges De Moor	Belgium
EuroRec	Jos Devlies	Belgium
ProRec-BE	Miet Dequae	Belgium
Ramit	Pascal Coorevits	Belgium
Pro-BG	Dimitar Tcharaktchiev	Bulgaria
HDMI	Vesna Ilakovac	Croatia
CSMI	George Tsouloupas	Cyprus
CNFeH	Milan Ruzicka	Czech Republic
MEDIQ	Knut Bernstein	Denmark
EES	Madis Tiik	Estonia
EES	Monica Tartu	Estonia
Pro-DE	Rolf Engelbrecht	Germany
Forth	Angelina Kouroubali	Greece
ESKI	Surján György	Hungary
Pro-IE	Tonny Kenny	Ireland
Pro-IT	Angelo Rossi Mori	Italy
Pro-IT	Gregorio Mercurio	Italy
Centro Polikliniku Vilnius	Irenijus Puotkalis	Lithuania
SANTEC	François Wisniewski	Luxembourg
Pro-NL	Gerard Freriks	Netherlands
KITH	Torbjorn Nystadnes	Norway
LODZ	Rafal Zdrajkowski	Poland
LODZ	Marcin Zawisza	Poland
ACSS	José Luis Belona Graça	Portugal
Pro-RO	George Mihalas	Romania
Pro-RO	Mircea Focsa	Romania
Pro-SB	Nada Teodosijevic	Serbia
Pro-SK	Milada Kovarova	Slovakia
Pro-SI	Leo Ciglencecki	Slovenia
HUF	Pablo Serrano Balazote	Spain
IHC	Adolfo Munoz Carrero	Spain
Pro-UK	Dipak Kalra	United Kingdom

Table 11 Attendees Tallinn Meeting

The Power Point presentation used to coordinate the meeting is available on the following link:

http://www.eurorec.org/consortium_intern/EHR-Q/index.cfm

Go to the map "Meetings" and "20010617-18_Tallinn". Select the file TallinnMeeting20100617b.pptx.

The presentation includes the slides prepared by each of the partners highlighting their activities within the project.

3.9.2 Consortium Meeting, Sofia, December 9 – 10, 2010

The Fifth Full Consortium Meeting was organised by ProRec-Bulgaria in Sofia.

EHR-QTM Meeting		
Sofia, December 9 and 10, 2010 Conference Hall, Bulgarian Academy of Science House 50 Blvd Shipchenski Prohod, 1113 Sofia – Tel. +359 2 871 00 09		
December 9 th , 2010		
12:45 – 13:45	Lunch Offered by ProRec Bulgaria	
13:45 – 13:55	Welcome & Practical Issues	Dimitar Tcharaktchiev and Miroslav Nikolov for ProRec Bulgaria
13:55 – 14:10	Roll Call of Delegates	All
14:10 – 15:00	EHR-Q TM project progress Workshops February – July Getting the reports Announced Workshops	Jos Devlies
15:00 – 15:30	Coffee Break	
15:30 – 16:50	National Reports	All
16:50 – 17:05	Status of the Repository New statements Translations National Statements Other New Functions: comments and specifications Link to HL7	Jos Devlies
17:05 – 17:35	Repository Validation	Gerard Freriks, Leo Ceglencecki and Jos Devlies
17:35 – 18:30	EuroRec Seal and the role of the partners Overview of the labelled systems Tariff and involvement of the partners	Jos Devlies
18:30 – 20:00	Break	
20:00 –	Dinner at the Panorama Restaurant, Hotel Kempinski – Zografski, 18 th Floor	
December 10 th , 2010		
09:00 – 09:30	Using the EuroRec Tools	Jos Devlies
09:30 – 10:30	EHR Market Overview and Deliv. D3.1 Part 1 of Deliverable D3.1 Part 2 of deliverable D3.2 Overviews of the types of systems How to exploit the information?	Jos Devlies
10:30 – 11:00	Coffee Break	
11:00 – 11:30	EHR-Q TM Success Indicators. Progress in certification in the different countries.	All
11:30 – 12:30	EHR-Q TM Roadmap to Certification	Jos Devlies
12:30 – 12:45	Management Issues. Next Meeting.	Jos Devlies
12:45 – 13:00	Any other issue: End of the meeting	All
13:00 – 14:00	Lunch Offered by ProRec Bulgaria	

Table 12 Agenda Consortium Meeting Sofia

Attendees at the Sofia Meeting

Participant Short Name	Attendee	COUNTRY
EuroRec	Jos Devlies	Belgium
ProRec-BE	Miet Dequae	Belgium
HDMI	Vesna Ilakovac	Croatia
MEDIQ	Morten Bruun-Rasmussen	Denmark
EES	Monica Tartu	Estonia
Pro-DE	Rolf Engelbrecht	Germany
Forth	Angelina Kouroubali	Greece
Pro-IE	Tonny Kenny	Ireland
Pro-IT	Angelo Rossi Mori	Italy
Pro-IT	Gregorio Mercurio	Italy
Pro-IT	Leon Minervini	Italy – Poland
SANTEC	François Wisniewski	Luxembourg
KITH	Torbjorn Nystadnes	Norway
LODZ	Rafal Zdrajkowski	Poland
LODZ	Marcin Zawisza	Poland
ACSS	José Luis Belona Graça	Portugal
Pro-RO	George Mihalas	Romania
Pro-SB	Nada Teodosijevic	Serbia
Pro-SK	Milada Kovarova	Slovakia
Pro-SI	Leo Ciglenceki	Slovenia
HUF	Pablo Serrano Balazote	Spain
IHC	Adolfo Munoz Carrero	Spain
Pro-AT	Stefan Oberbichler	Austria
CSMI	George Tsouloupas	Cyprus
CNFeH	Milan Ruzicka	Czech Republic
Pro-BG	Dimitar Tcharaktchiev	Bulgaria
Pro-BG	Miroslav Nikolov	Bulgaria
EXCUSED		
Pro-NL	Gerard Freriks	Netherlands
Pro-UK	Dipak Kalra	United Kingdom
ESKI	Surján György	Hungary
CPKV	Irenijus Puotkalis	Lithuania

Table 13 Attendees Consortium Meeting Sofia

The Power Point Presentation used during the meeting is available on the web site of EuroRec:

http://www.eurorec.org/consortium_intern/EHR-Q/index.cfm

Go to the map "Meetings" and "20101209_Sofia". Select the file EHR-Q-TN-Sofia-December9-2010.pptx.

The presentation includes the slides prepared by each of the partners on the "national" evolutions and progress regarding quality labelling and certification.

3.10 Documentation for the Workshops Year 3

Deliverable D4.5, to be submitted to the Commission and sent to all the partners, contains the documentation for the Year 3 National Workshops.

The focus of the Workshops is still on the validation of the EuroRec functional statements and on the validation of the EuroRec tools.

Standard "lecture" based Workshops are still needed in some of the countries. It is up to the partners to promote what's best for them and for the case for certification of EHR systems in their country.

The documentation suggests three different scenarios for the validation of those statements:

- A National Workshop of Application Vendors is surely one of the best ways to collect input from the different stakeholders, but might be difficult to organise such a meeting more especially in some (larger) countries. It offers – if prepared correctly - the big advantage to be able to “discuss” the issues raised and to inform the vendors on what’s intended by a statement. It also offers the advantage of being able to collect real time remarks and suggestions.

The agenda of such a National Workshop could be:

1. Purpose of the Workshop
 2. Where are the statements coming from? How are they defined?
 3. Use of the Fine Grained Statements in the first level aggregates: the Good Practice Requirements.
 4. What kind of validation expected.
 5. Presentation of the domain / set of statements selected for validation.
 6. Individual validation of the statements by each of participants (simultaneously and separately).
 7. Compilation of the individual validation forms.
 8. Presentation and discussion of the results (if possible)
 9. Further possible steps.
- A National Survey on paper or electronically could be a good alternative. A possible form is proposed in Annex A.
 - A National Survey followed by a National Workshop. This seems to be the ideal scenario, enabling a more intensive evaluation and debate on the remarks and suggestions formulated by the stakeholders.

Sets of Statements have been included in the deliverable, more especially related to:

- 8.1 EHR Record Interface and Exchange Services (A05)
- 8.2 EHR Generic Data Properties (A09)
- 8.3 Medication Selection and Item Content (A10.0)
- 8.4 Medicinal Prescription Production and Dispensing of a Medicinal Product (A10.1)
- 8.5 Medication Decision Support and Medicinal Care Quality Surveillance (A10.2)
- 8.6 Medication Display, Structuring and Management (A10.3)
- 8.7 Medication Administration (to the patient) (A10.4)
- 8.8 Medication Effects (A10.5)
- 8.9 Laboratory Services (A32)
- 8.10 Imaging Services (A33)
- 8.11 Clinical Trials and Research Requirements (B23)
- 8.12 EuroRec Seal

The documentation also contains a “manual” for the EuroRec repository. The intended users of the manual are the EHR-QTM partners, preparing themselves to effective quality assessment and certification activities.

The Workshops organised in the last 6 months of the project lifetime may / will include elements from the “Roadmap” deliverable.

4 Success Indicators

Several success indicators were listed in the Description of Work.

4.1 Number of workshops

44 Workshops were organised to date. This is, considering the withdrawal of one beneficiary, completely in line with the number of workshops foreseen in the Description of Work.

4.2 Number of attendees at the workshops

Two different types of workshops took place: congress type meetings and real validation workshops.

The number of attendees is relevant for the "congress type" or "lecture type" meetings. (L)

The number of attendees is irrelevant for the validation workshops. More important is to have the collaboration of the "suppliers" representing a large share of the market, and of the installed base. They are mostly the only ones with a realistic view on the importance and feasibility of a functional requirement, considering local market maturity. (V)

<i>Number</i>	<i>Date</i>	<i>Country</i>	<i>Attendees</i>	<i>Status</i>
WS22	2009.06.23	Ireland	130	L
WS23	2009.11.26	Nederland	30	L
WS24	2010.02.25	Greece	78	L
WS25	2010.04.17-18	Cyprus	33	L
WS26	2010.05.21	Luxembourg & Belgium	16	V
WS27	2010.07.15	Greece & Cyprus & Germany	25	L
WS28	2010.07.05	Romania	20	V
WS29	2010.08.02	Bulgaria	49	L
WS30	2010.09.17	Croatia	23	V, L
WS31	2010.09.28	Poland	63	L
WS32	2010.10.14	Estonia	128	L
WS33	2010.10.14-15	Slovakia	114	L
WS34	2010.10.20	Nederland	7	V
WS35	2010.11.04	Denmark	20	L
WS36	2010.11.09	Serbia	6	V
WS37	2010.11.23	Norway	35	L
WS38	2010.11.25	Portugal	18	V
WS39	2010.11.30	Italy	522	L
WS40	2010.12.01	Estonia	70	L
WS41	2010.12.16	Spain	53	L
WS42	2010.12.17	Austria	15	L
WS43	2011.01.21	Czech Republic	18	V
WS44	2011.01.26	Belgium	8	V

Table 14 Attendees to the National Workshops

4.3 Representativeness of the attendees

The suppliers participating at the validation workshops represented a large majority (sometimes more than 90%) of the installed base.

Five important events, organised by partners of the consortium, were attended by national health authorities and decision makers. They are the meetings organised in Zagreb, Lodz, Tallinn, Lisboa and Alcorcon-Madrid.

EuroRec was present and participated at four of them: Zagreb, Lodz, Lisboa and Alcorcon-Madrid. Each of these meetings offered the opportunity to meet national health authorities and to discuss eventual progress towards quality labelling and certification.

4.4 Number of attendees at the EuroRec Conference

We organised two EuroRec Conferences in 2010.

The first one was organised as a parallel session during the WoHIT2010 Conference in Barcelona, attracting over 50 attendees.

The second – one full day – conference was organised in Tallinn, after the EHR-QTM Consortium meeting. The Conference attracted on top of the EHR-QTM meeting attendees some 20 local (Baltic) interested experts.

4.5 Number of countries deciding to implement certification

Certification took place in Belgium end 2010 – January 2011 with assistance of ProRec-BE and allied partners. The evaluation of the test results and possible retesting is still going on. The Belgian test criteria (selection of criteria) were meanwhile mapped to the EuroRec Seal Level 1, as reported in Deliverable D4.4.

The Serbian government issued a "Rulebook" with a title "Rulebook on more detailed contents of technological and functional requirement for establishing the Integrated Health Information System". The Rulebook was published in the "Official Gazette of the Republic of Serbia", no. 95/2009.

The Rulebook integrated the EuroRec Seal Level 1 statements as Serbian criteria and referring to the EuroRec Fine Grained Statements.

A revision of the Rulebook is planned for June 2012, including at that moment the EuroRec Seal Level 2 statements as Serbian criteria.

RULEBOOK

**ON MORE DETAILED CONTENTS OF
TECHNOLOGICAL AND FUNCTIONAL
REQUIREMENTS FOR THE ESTABLISHING THE
INTEGRATED HEALTH INFORMATION SYSTEM**

("Official Gazette of the Republic of Serbia", no. 95/2009)

Article 1

This Rulebook shall prescribe more detailed contents of technological and functional requirements for the establishing the Integrated Health Information System.

Figure 5: Serbian Rulebook

Number	Requirements
2.3.1.1	The system offers to all users nationally approved code list as a support to structured and coded registration of health data. EuroRec GS002437.1*
2.3.1.2	Initialization and synchronization with code system CIS/HIF (Attachment 2).
2.3.1.3	Selection lists and reference tables offered by the system are the same for all users of one and the same application. EuroRec GS002672.1
2.3.1.4	The system enables the allocation of different access rights (reading, entering, etc.) taking into account a degree of confidentiality. EuroRec GS002269.1
2.3.1.5	The system takes into account the access rights when it allows the access to health data, with respect to the role of the healthcare service provider towards a patient. EuroRec GS002415.1
2.3.1.6	The system enables the user to designate individual health items as confidential. EuroRec GS001945.1
2.3.1.7	Each user is uniquely and persistently identified. EuroRec GS002268.1
2.3.1.8	The system ensures the initialization of internal code lists (organizational structure, staff records, etc.)
2.3.1.9	The initialization and synchronization with the rules defined by legal framework, recommendations and on the basis of referential, experienced or logical values. On the basis of these rules, prohibitions, alerts, reports are created, automatic messages sent, recommended choices displayed, etc).
2.3.1.10	Each version of a health item is uniquely and persistently identified. EuroRec GS002266.1
2.3.1.11	Each version of a health item has a date and time of registration. EuroRec GS001537.1
2.3.1.12	Each version of a health item has a user responsible for the effective data entry identified. EuroRec GS001538.1

Figure 6: Extract of page 6 of the Serbian Rulebook

The EuroRec Seals Level 2 granted to applications in Serbia clearly illustrates the importance of position statements issued by the national health authorities. It is surely not "by accident" that several Serbian applications or foreign applications operating in Serbia requested for the Seal Level 2.

The Norwegian partner in the consortium did have high level discussions with representatives of the Ministry during the Norwegian workshop. The discussion is no longer on the principle of quality labelling and certification but more on the way to do so: a comprehensive testing or a more step-wise approach starting with self-declaration by the suppliers and if needed (for a subset of functions / criteria) later on with independent third party testing.

Quality labelling and Certification is very high on the agenda of quite some countries: The Netherlands, Portugal and Spain with concrete contacts between the national EHR-QTM partner, the Health authorities and EuroRec. It is, however, difficult to estimate when these contacts will result in concrete decisions.

Other countries are moving from validation of administrative and billing functions to validating at the same time or separately specific clinical functions as e.g. chronic disease management or lab results management, e.g. Germany and Austria.

The description of work considered that it would be an impressive success if three countries decide, during the lifetime of the project, to start quality labelling and certification of the eHealth products in their market.

4.6 Conclusions and action plans defined during the workshops

The issues debated / discussed during the workshops, the conclusions and suggestions as well as the concrete actions planned are listed in the deliverables D3.2, D4.1 Part I and D4.1 part II.

The deliverables also illustrate how the consortium reacted to these comments, by providing an answer, by updating some statements, by initiating interpretations and by enabling national variants.

4.7 Number of applications granted with a EuroRec Seal

The number of applications granted with a EuroRec Seal is now 15. Five of them were granted a Level 1 Seal, 10 of them were granted a Level 2 Seal.

Six more applications are candidates for a Seal Level 2. The procedure was started recently.

5 Problems and Remedies

The maintenance of the Repository as well as the maintenance of the Market Overview present important challenges.

The resources available are not comparable with available resources in other quality labelling initiatives (e.g. ISO, resources of DKV in Germany) or in other countries (e.g. United States).

This is of course beyond our power.

Continuity of the investment will depend on continuity of resources and on "political decisions" taken or not.

The lack of a "political decision" at National as well as at European level to enforce Quality Labelling and Certification of Health IT applications reduces the "attractiveness" of such activities.

The Serbian case clearly illustrates that industry needs motivation before submitting their application to quality assessment and certification, included the willingness to pay for it.

The Belgian case illustrates that "incentives for the use of quality labelled EHR systems" have roughly the same effect.

The German and Austrian cases illustrate that a "regulatory requirement" has the same effect. German and Austrian billing / administrative applications need a kind of "certificate" certifying that the applications are able to provide the required data in an appropriate way.

All these cases illustrate that a market for certification requires at the start a "decision" from an "authority".

The National Workshops organised within the EHR-Q^{TN} project are still important to bring the message. They offer opportunities to meet decision makers. Those decision makers are anyway yet identified in the Market Overview.

Support of certification by the European Commission services can and should also be done indirectly and included in the requirements for research projects.

Piloting is frequently an essential part of research and implementation projects funded by the Commission. Only quality labelled e-Health products should be used in such projects.

Combining functional and interoperability testing is another challenge. A product or service should ideally be tested for both aspects. Interoperability testing is still frequently limited to "exchangeability" testing, enabling applications to exchange garbage.

Semantic Interoperability is beyond the scope of the project, but remains a permanent point for attention.

EuroRec is on the other hand participating into the HITCH project "Healthcare Interoperability Testing and Conformance Harmonisation" in order to seek ways of cooperation and harmonisation of processes and procedures.

The contract amendment enabling the new Lithuanian partner to replace ProRec-FR is still pending.

This is also beyond our power.

The Serbian partner, expecting some compensation for the very remarkable efforts done, did not wait for the approved funding foreseen in the Contract Amendment before operating as a full partner and realising significant progress towards full certification of the National market for EHR systems.

6 Expectations for Year 3

Some more efforts will be done to validate the EuroRec Use Tools. This will be included in the "mandatory activities" of the partners. Full validation will only be realised once quality labelling has become a standard procedure before putting a product on the market.

The consortium will of course go on with organising National Workshops. It is still expected to reach the planned 72 workshops.

Validation and Translation of the EuroRec Descriptive Functional Statements will go on.

The main focus of Year 3 will be on two topics:

- The "Roadmap for Sustainable Certification of EHR systems" (Deliverable D5.2).
- The exploitation of the Market Overview in order to stimulate "spontaneous certification", on request of the suppliers.

The consortium will refine its procedures for granting a EuroRec Seal. It is expected to certify another 10 to 20 products in Year 3.

The EuroRec Seals Level 1 and Level 2 will be revised (slightly) and we will continue in documenting the statements with "interpretation statements".

The consortium would like to start with "modular seals". Principles will surely be agreed on but we cannot commit to finalise that within the timeframe of the project and the available resources.

The consortium expects to prepare a proposal in order to preserve the "network" for future certification activities.