

Response of Questionnaire Round 1 – General analysis

Introduction

Part of the CHARM programme is the Market Analysis where the input of industry is requested. The market analysis consists of Round 1 and Round 2.

During the Intertraffic 2012 event, the CHARM team and governance board members presented the kick-off of Round 1. After the presentation of the main aims of CHARM, industry was asked to respond to several question posed in a questionnaire.

Purpose

The purpose of this document is to give feedback to Industry on the results of Round 1.

Results

- *Number of questionnaires*

In total 37 questionnaires were returned by 41 (sub) organisations.

- *Type of organisation*

The responding organisations can be categorised in the following categories:

Categories of respondent

Consultant	7
(General or public) service provider	8
IT service provider	17
ITS provider	8
Other	1
Total	41

The chosen categorisation gives an overview of the organisations' background, but doesn't discriminate between specialists and generalists.

- *Country of origin*

The respondents (i.e. the contact persons) of the organisations originate from the following countries:

Country of contact person

Australia	1
Germany	2
The Netherlands	16
United Kingdom	22
Total	41

- *Current business partner*

About two-thirds of the respondents are currently not doing business with the agencies (on CHARM scope contracts):

Currently doing business with HA/RWS

Yes	15
No	26
Total	41

- *Level of complexity*

The following table presents the answers to the question on how challenging the CHARM programme is.

Difficulty of CHARM	
Entirely feasible, not even challenging	2
Entirely feasible	8
Challenging, but feasible	25
Not feasible	1
N/A	1
Total	37

- *Challenges of the CHARM programme*

About two-thirds of the respondents claimed that the CHARM programme is 'challenging'. There are several challenges mentioned:

Challenges mentioned

Interface with legacy (roadside) equipment
Continuity of service (Migration from old systems)
Prevention of a vendor lock-in
Security of systems
Safety of road users
Differences between RWS and HA (Roadside technology, cultural, organisational, business, national legislation)
Cooperation and alignment of the internal organisations
Defining the user requirements
Incumbents which are not willing to give up their current involvement
Cost effectiveness
Limitations due to COTS products (proprietary products)
Supplier representation in both countries
Transfer list of requirements to suppliers
Energy consumption

- *Relevant products and/or services*

The respondents were asked to mention their relevant products and/or services to the CHARM programme according to the requirements that we stated in the Market consultation document. The results can be seen in the table below.

Relevant products/services	
System Integration (general services)	16
Product (specific product)	20
Consultancy (project & programme management; technical consultancy)	13

The products that the respondents mentioned in the questionnaire ranged from specific ITS (sub) systems to a complete set of systems that encompass the entire functionality of a TMC.

- *Mentioned ideas*

Most respondents mentioned an idea that steers towards a possible solution. In many cases this idea involved a product of their own, being the core of the new system.

Mentioned ideas	
Service Oriented Architecture	2
One core system, which will encompass a large range of functionality of the TMC. Other systems can link into this system.	7
Virtualisation of systems	2
One complete solution for all functionality	3
New architecture	5
COTS products	5

It can be concluded that the provided ideas for a solution are interrelated or overlapping. E.g. COTS products can be used to add functionality to the 'one core system' idea and the 'Service Oriented Architecture' is a specific example of a 'new architecture' etc. From the CHARM perspective it's important to further explore these ideas. How do the different architectures relate to each other, do they support or exclude COTS products etc. This exercise will take place in Round 2 of the market consultation.

- *Suggestions for Round 2*

The following suggestions for Round 2 are made:

Suggestions for Round 2

More detailed discussion

- 1-on-1
- workshop

Provide more detailed information to suppliers

Visits to TMCs

Networking day

- To discuss interfaces and feasibility

Demonstrations by suppliers

Pilot projects

- Proof of concept contest with promising suppliers
- Pilot with test cases

Interactive process to reach a high level design (architecture) with supplier. Also creation of business case based on design.

Visits to suppliers

Increase confidence of actual procurement (Board commitment)

Business analysis by Technology providers

Although some of the suggestions don't fit in the CHARM programme (e.g. due to timescales or scope) we highly appreciate the suggestions and we'll try to take these into account as much as possible. In Round 2 we'll try to arrange a visit to our current TMCs in order to understand our business processes and the existing interfaces and context of our TMC systems. Also we'll organise the possibility to discuss any further response on a one on one basis.

Conclusion

Round 1 of the CHARM market consultation was very useful to identify the interested suppliers and to get an understanding of the differences (category, products & services etc) between them. The open format of the questions resulted in a wide range of answers. The second round must lead to a more specific information gathering. The Market consultation Round 2 process will be communicated via www.rws.nl/CHARM.