



SHEER WP7 six months Report, 30.10.2016 (A. Garcia, WP7 Leader)

- **List of the staff actively involved in the WP**

There are three project partners involved in the activities of the WP7 (AMRA, KeU, KNI). The staff involved by partner are:

- Alexander Garcia-Aristizabal, WP leader, AMRA (Italy).
- Raffaella Russo, AMRA (Italy)
- Simona Esposito, AMRA (Italy)
- Nigel Cassidy, KeU (UK)
- Bernard Dost, KNMI (Netherlands)

- **Objectives expected after Month 12**

The main outcome of WP7 during the first 12 months of the project has been a deep review of the state of the art and the definition of the pertinent risk pathway scenarios. The main objective from the second year is the definition of the probabilistic model for the quantitative assessment of these scenarios.

- **A summary of progress towards objectives and details for each task in the first six months**

During the last 6 months of the project, the activities in WP7 have been focused on the implementation of the probabilistic model for quantitative multi-hazard risk assessment. For this problem, a bow-tie approach has been identified as the tool that better adapts for this problem. Therefore, in this period we have been working on the implementation of the identified risk pathway scenarios (i.e., see Deliverable D7.1) in a bow-tie structure. Furthermore, important progresses have been made towards the definition and implementation of the probabilistic tools for assessing the different typologies of phenomena involved in these pathways

Details by task:

Task 7.1:

The main outcome of the activities under this task have been presented in deliverable D7.1: "Framework for holistic multi-risk assessment of shale gas operations: (1) Methods for identifying and structuring scenarios". At the moment, the activities under this task are focused on the 'translation' of the identified risk pathways into the logic required for implementing them in a bow-tie structure.

Task 7.2:

This task is in charge of developing the probabilistic framework for quantitative assessment. AMRA has defined logical structure of the multi-risk framework, which is based on the implementation of a "bow-tie" approach, have been identified as the most efficient way to face this problem. This task has been working on the tools for performing quantitative assessments (software and physically-based probabilistic models).

Task 7.3:

No yet started. The activities in this task are dependent of the output of the other two tasks of the WP.

- **Highlight clearly significant results;**
Risk pathway scenarios have been structured following a bow-tie logic. Probabilistic model and software tools are being implemented and tested.
- **If applicable, explain the reasons for major deviations from Annex I and their impact on other tasks;**
Not applicable.
- **If applicable, explain the reasons for failing to achieve critical objectives and/or not being on schedule and explain the impact on other tasks as well as on available resources and planning;**
Not applicable.
- **If applicable, propose corrective actions.**
Not applicable.
- Publications and papers in print
None.

Deliverables due at the date

Please complete this table if deliverables are due for the reporting period

Table 1. Deliverables due at the date								
Del. no.	Deliverable name	Version	WP no.	Lead beneficiary	Nature	Dissemination level¹	Delivery date from Annex I (proj month)	Actual Foreca deliver Dd/mm
D7.1	Framework for holistic multi-risk assessment of shale gas operations: (1) Methods for identifying and structuring scenarios	Final	7	AMRA	Report	PU	M12	M13

¹PU **Public**
 PP **Restricted to other programme participants (including the Commission Services)**
 RE **Restricted to a group specified by the consortium (including the Commission Services)**
 CO **Confidential, only for members of the consortium (including the Commission Services)**

