



**SHEER WP2 Report, 27.11.2015
for the Progress / PTM Meeting in Katowice, 21.11.2015
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Short summary of the progresses of the period

One of the deliverables of the SHEER project is the SHEER database where data from on-site monitoring of shale gas exploration – exploitation operations at the Wysin Site will be integrated. Moreover, the database will gather the data from several past case studies concerning various types of impacts from related technologies.

The compilation of SHEER database has been planned within Work Package 2 „Compilation of the SHEER Database“ during the period of 36 months. The coordinating institution is IGF PAS with the contributing of: AMRA, KeU, GFZ, KNMI, RSK W Ltd and University of Wyoming.

WP2 work-breakdown structure is split into four tasks: SHEER database functionality, harmonizing SHEER database components, integration of data from on-site monitoring with SHEER database, management of data resources and access to the SHEER database. The first sets out to design the SHEER database to be appropriate for the project purposes. The second task will harmonize and homogenize information uploaded to the SHEER database. The third is dedicated to upload the data from on-site monitoring and the last one will focus its activities on policies, practices and procedures for proper and robust management of the full data lifecycle needs of SHEER project.

During the first six months of the project the following project partners actively participated in WP2: IGF PAS, KNMI, KeU, AMRA and RSK W Ltd. The objectives expected after the first reported period have been achieved. Table 1 below provides the detailed information about the expected objectives and a summary of progress towards objectives and details for each task in the first six months of the project.

Table 1. A summary of progress towards objectives and details for each WP2 task in the first six months.

Task	Expected objectives	Summary of progress
SHEER database functionality	Database design	The SHEER database has been constructed to storage, manage, configure, verify and describe data. Modules arranged for SHEER database are: storage, episodes according to SHEER proposal, schema supporting accepted data structure and rules for metadata and document repository. The comprehensive web services allow speeding up the data integration process and reducing the possible mistakes while incorporating diverse heterogeneous datasets through quality control workflow comprising four steps with three checkpoints. The first internal milestone has been reached out: [WP2.T2.1.M1]: Project of SHEER database capable of collecting multidisciplinary data accepted by PMT.
	Establishment of the technical channels and facilities at IGF Local Data Center for the acquisition, storage and distribution of datasets with data quality control procedures	

Harmonizing and homogenizing SHEER database components	Review of the content and quality of the data. Collecting supplementary information on methods of data parameterizations.	The information about the type and formats of data planned to be uploaded to SHEER base has been gathered. The following actions have been done: revision of the data; determination of data accuracy and limitations; the SHEER database inquiries were analysed and data which needed additional processing and format changes was determined; the first round of metadata were prepared following the XML standard format. The internal milestone [WP2.T2.2.M1]: Inventory of the data from past case studies has been reached. The detailed information about the results of work done within this subtask has been summarized in Deliverable 2.2 "Report on data availability, data comprehensiveness and metadata".
	Determining accuracy and limitations of the data. Enhancing the datasets from the standpoint of their comprehensiveness and data completeness	
	Homogenizing data formats	
	Metadata preparation	
Integration of data from on-site monitoring with SHEER database	Data transmission from the site	Presently, the seismic data are on-line transmitted from the site from 16 short period stations to the local server dedicated to the SHEER project: sheerwer.igf.edu.pl. The 6 broadband and 9 short period stations work offline. At server the services for online data acquisition, archiving and saving have been implemented. Also the air quality monitoring has been starting more than three months ago. Atmospheric trace gases and particulate matter concentrations are measured in air pollution monitoring station located in Stary Wiec. Data are periodically downloaded to the computer located in the IGF PAS. After verification and validation process, data are sent to the project database on a monthly basis. The two internal milestones: [WP2.T2.3.M1]: Field tests for real-time data transmission completed and [WP2.T.2.3.M2]: Online data visualizing services available have been reached.
	At server: online data acquisition, archiving and saving	
Management of Data Resources and Access to the SHEER database	Policies, practices and procedures that properly manage the full SHEER data lifecycle	We have designed the Data Management Plan and the rules of data access. Key performance indicators have been proposed for further discussion. These subtasks are in progress and they are expected to be completed after 12 months of the project.
	Access	
	Key performance indicators	

The most significant results achieved in the first half of year of the project are:

- The design of SHEER database functionalities;
- Verification of the data for integration, its availability and data comprehensiveness;
- The completed integration of the first episode of SHEER database - Gross Schoenebeck;
- Establishment of the technical channels from data transmission from the site.

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 / Forecast delivery date Dd/mm/yyyy	Status No submitted/ Submitted	Contractual Yes/No	Comments
2.2	Report on data availability, data comprehensiveness and metadata	3	2	IGF PAS	Report	CO	6	07/11/2015	Submitted	Yes	

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)

