

**PROJECT ACRONYM: SyrNemo**

**PROJECT FULL TITLE: "SYNCHRONOUS RELUCTANCE NEXT  
GENERATION EFFICIENT MOTORS FOR ELECTRIC VEHICLES"**

**GRANT AGREEMENT NO: 605075**

**Deliverable number: D6.4**

**Report on set up web site, file and project management tool**

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Dissemination level		
PU	Public	X
PP	Restricted to other programme participants (including the Commission)	
RE	Restricted to a group defined by the consortium (including the Commission)	
CO	Confidential, only for members of the consortium (including the Commission)	



## TABLE OF CONTENTS

1	SUMMARY .....	2
2	TARGETS.....	3
3	IMPLEMENTATION OF WORK – RESULTS .....	4

## 1 SUMMARY

A public webpage was built and placed online at the beginning of November 2013, two months before the requested delivery date. The website is available at following public domain address:

<http://www.syrnemo.eu/>

This website will be used to provide general information about the projects research results and the additional value of the SyrNemo approach will also be presented to a broader public. The content will be provided by the SyrNemo project partners as a common effort.

The SyrNemo project and file management system based on Microsoft SharePoint © system was set up and is in use to since the beginning of December 2013. All periodical reports, minutes of meetings, working- and final documents will be stored and shared among the responsible partners or the whole SyrNemo consortium.

## 2 TARGETS

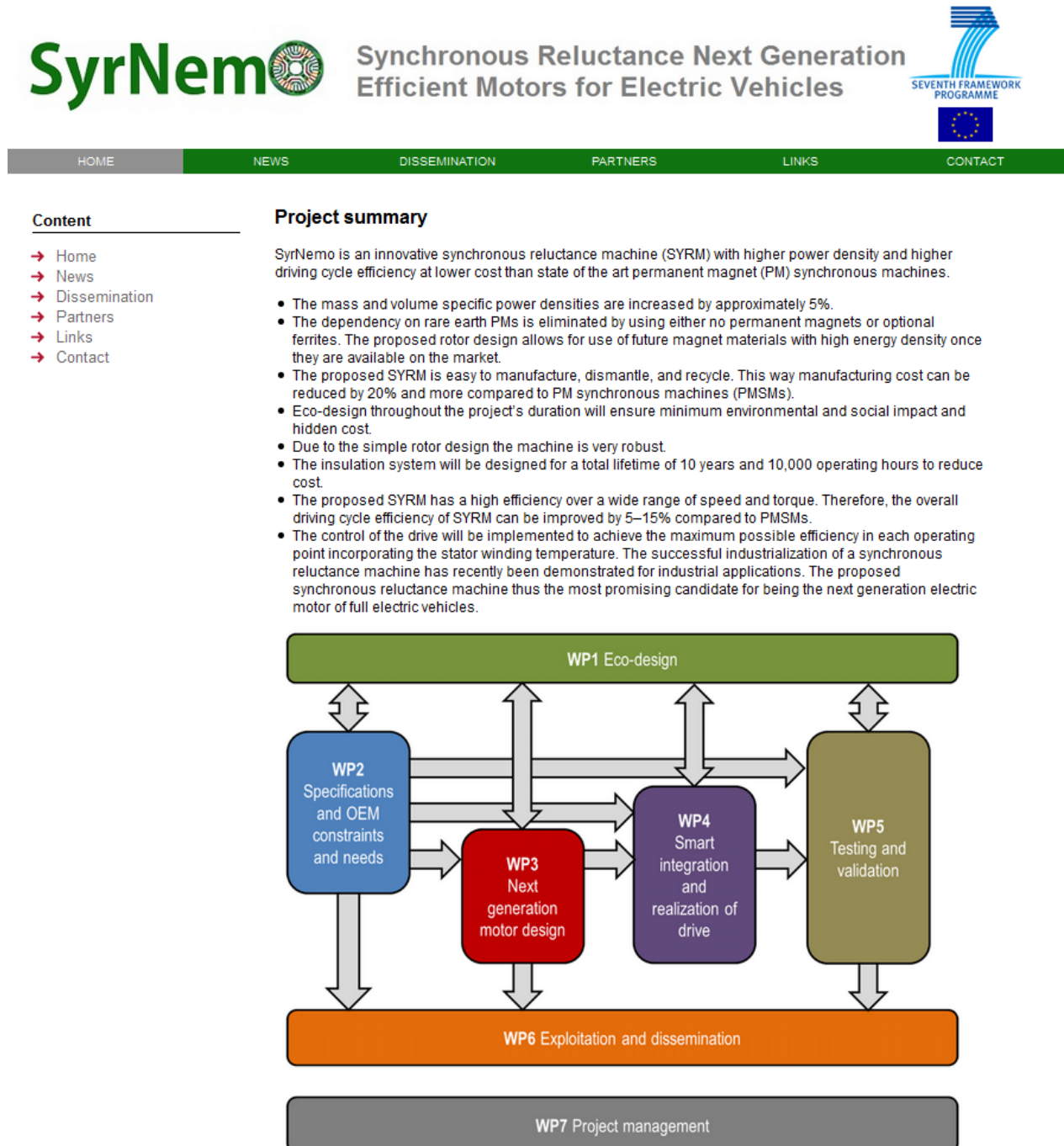
The SyrNemo website serves as a platform for communication of project news and upcoming events and will contain following informations:

- Project scope and targets
- Public events related to the projects targets
- Public reports (especially results regarding risk assessment and relevant results of the validation activities, e.g. crash test results)
- Contact information for the public

The file management system facilitates the workflow of collaboration among the SyrNemo partners and project management tools allow tracing the project status for each the individual work package, deliverables and the whole project.

### 3 IMPLEMENTATION OF WORK – RESULTS

Sample of the website (January 2013) available at <http://www.syrnemo.eu/>



**SyrNemo** Synchronous Reluctance Next Generation Efficient Motors for Electric Vehicles

HOME NEWS DISSEMINATION PARTNERS LINKS CONTACT

**Content**

- Home
- News
- Dissemination
- Partners
- Links
- Contact

**Project summary**

SyrNemo is an innovative synchronous reluctance machine (SYRM) with higher power density and higher driving cycle efficiency at lower cost than state of the art permanent magnet (PM) synchronous machines.

- The mass and volume specific power densities are increased by approximately 5%.
- The dependency on rare earth PMs is eliminated by using either no permanent magnets or optional ferrites. The proposed rotor design allows for use of future magnet materials with high energy density once they are available on the market.
- The proposed SYRM is easy to manufacture, dismantle, and recycle. This way manufacturing cost can be reduced by 20% and more compared to PM synchronous machines (PMSMs).
- Eco-design throughout the project's duration will ensure minimum environmental and social impact and hidden cost.
- Due to the simple rotor design the machine is very robust.
- The insulation system will be designed for a total lifetime of 10 years and 10,000 operating hours to reduce cost.
- The proposed SYRM has a high efficiency over a wide range of speed and torque. Therefore, the overall driving cycle efficiency of SYRM can be improved by 5–15% compared to PMSMs.
- The control of the drive will be implemented to achieve the maximum possible efficiency in each operating point incorporating the stator winding temperature. The successful industrialization of a synchronous reluctance machine has recently been demonstrated for industrial applications. The proposed synchronous reluctance machine thus the most promising candidate for being the next generation electric motor of full electric vehicles.

**Workflow Diagram:**

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    graph TD
      WP1[WP1 Eco-design] <--> WP2[WP2 Specifications and OEM constraints and needs]
      WP1 <--> WP3[WP3 Next generation motor design]
      WP1 <--> WP4[WP4 Smart integration and realization of drive]
      WP1 <--> WP5[WP5 Testing and validation]
      WP2 --> WP3
      WP3 --> WP4
      WP4 --> WP5
      WP2 --> WP6[WP6 Exploitation and dissemination]
      WP3 --> WP6
      WP4 --> WP6
      WP5 --> WP6
      WP7[WP7 Project management]
  
```

Figure 3.1 Home view - web site SyrNemo

Sample views of the SyrNemo Sharepoint (January 2013), available with individual personal account, including different levels of access rights (work package and task leaders, deliverable responsible persons and work package members).

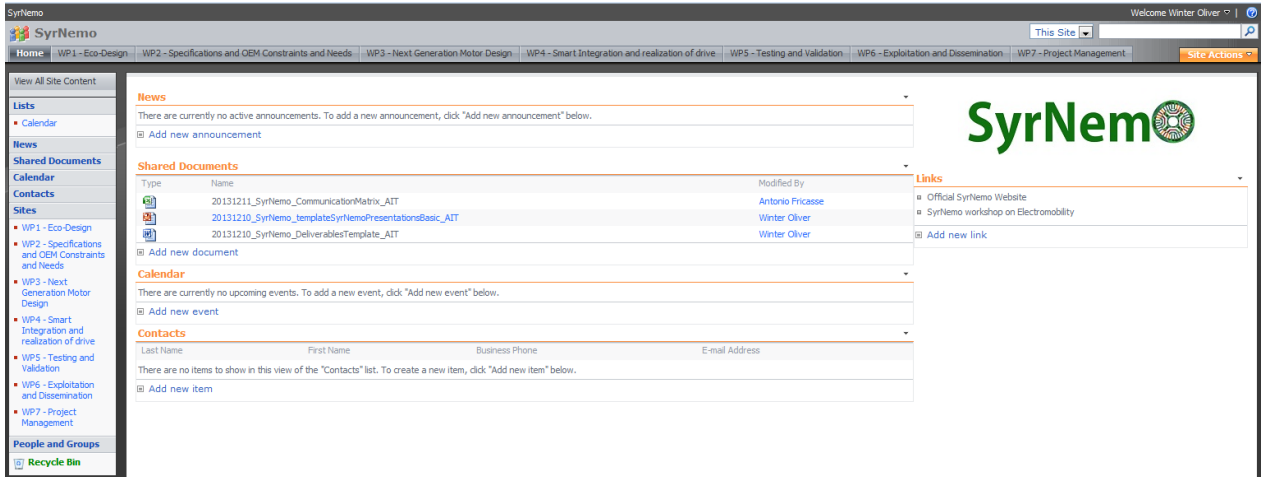


Figure 3.2 SyrNemo Sharepoint - Home tab

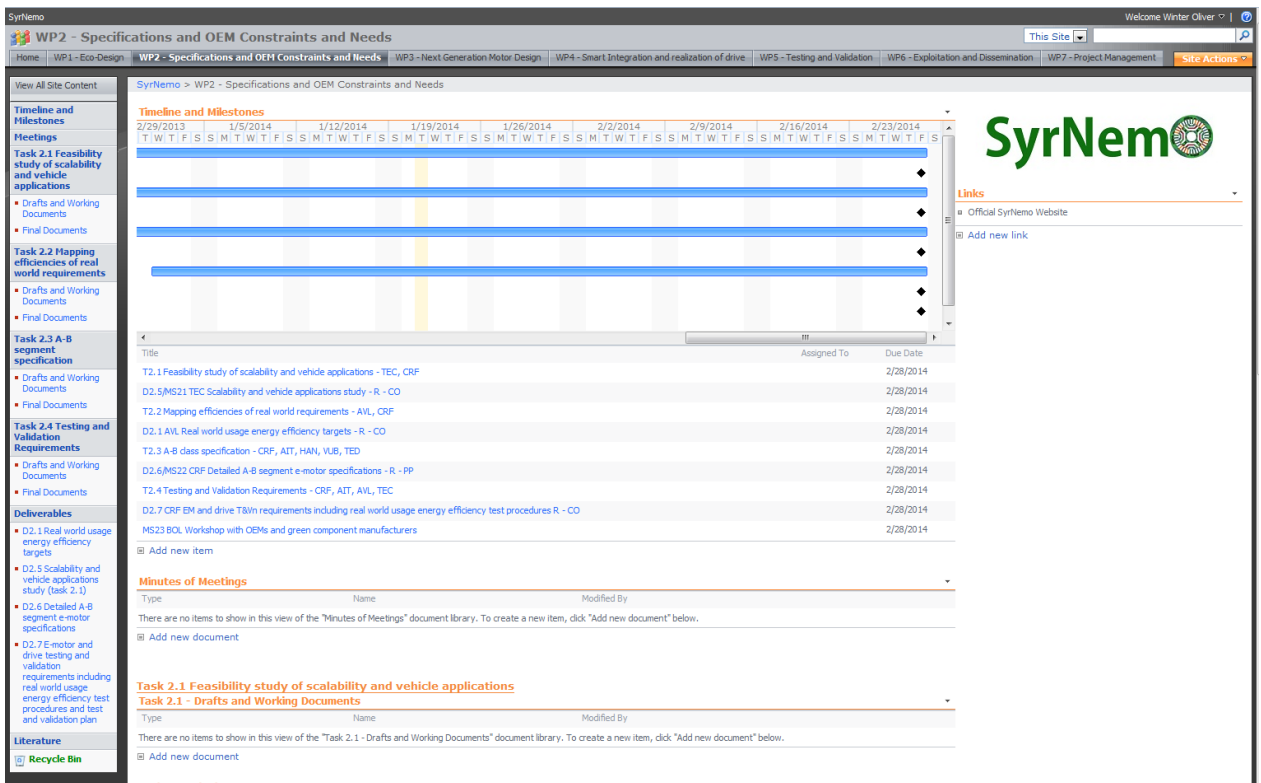


Figure 3.3 SyrNemo Sharepoint - WP2 tab