

ERA-Net Smart Energy Systems

Expert user's manual



Expera is a space for collaboration and knowledge sharing between the ERA-Net SES core projects as well as external experts.

- maintains **Living Documents** of strategic topics
- **Spotlights** the on-going activities and results
- enables continuous virtual dialogue in **Working Groups**
- shares information on past and on-going **Projects** in the field
- gets you in touch with the **Experts**
- shares the information on important **Events**
- shares the latest **News** with you



Expera Home



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Smart Energy Systems ERA-Net expera	LIVING DOCUMENTS	RESULTS	WORKING GROUPS	PROJECTS	EXPERTS	EVENTS	NEWS			
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	Regulatory and Market De Consumer and Citizen Inve Scalability and Replicabilit	olvement					nation has not e in all activities	been shared with you. Please of Expera	become a full expert to	Terms of Use When using the expera platform you have agreed to the conditions of use.
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imart Grids Plus is d by funding from the Union's Horizon arch and innovation ne.										
2020										



Become an expera member

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Expera – Software requirements:

- Edge
- Google Chrome
- Firefox

Expera – Roles of Members:

- Follower
- Expert
- Admin





Become an expera member - Functions

Functions		Expert	Follower
Expert profile	Set up your profile	Х	
	Edit	Х	
	Upload profile picture	Х	
Living Documents	Read	Х	х
	Comment	Х	х
	Read and contribute to discussion fora	Х	
Working Groups	Become member of the WGs	Х	
	Register for WG meetings	Х	
	Access WG documents	Х	
Project database*	Enter your projects	х	
	Edit your project profiles	х	
	Link your projects to your expert profile	х	
	Upload project reports and other documents	х	
News & Network	Receive the Newsletter	х	х
	See (other) expert profiles	Х	



Register

- open Expera portal site (<u>https://knost.smartgridsplus.eu</u>
- click "No user credentials?" link
- select type of registration (Expert or Follower)
- fill in registration form

Please select the type of account you'd like to obtain:

Register as a follower. This gives you access as a guest to the Knowledge Community. You can read most of the content but not contribute much.

Register as an expert. As an expert you will have more rights to contribute to the Knowledge Community. The Expera-Administrator will grant you these rights once you have entered your full expert profile.

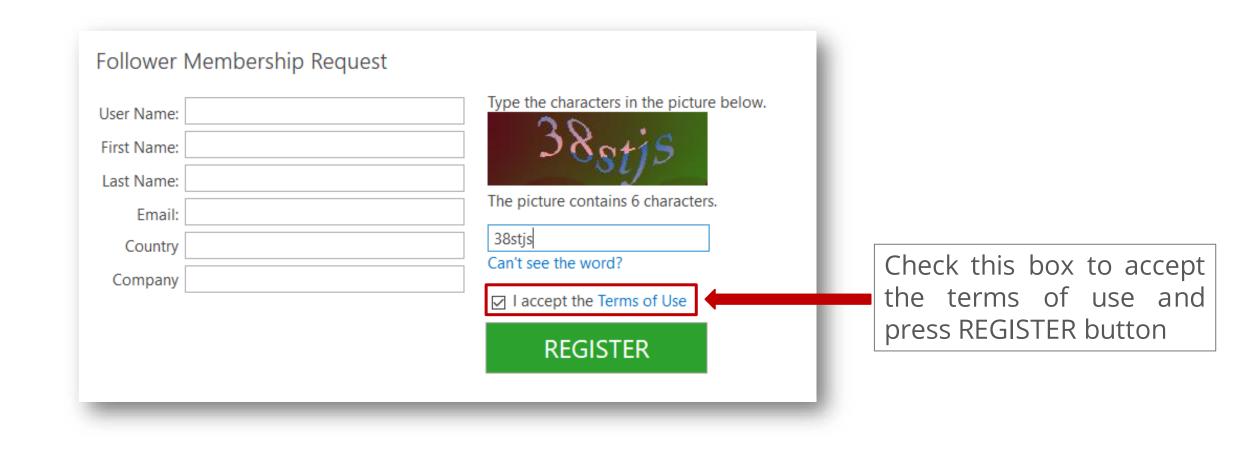
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Register: Registration form







Confirmation email upon your registration



• After your registration request has been approved, you'll receive an email with credentials and useful links:

Your request to join the ERA-Net Smart Energy System Knowledge Community expera has been processed.

You have been granted access to the expera Knowledge Community platform with the following credentials:

user name:demouser

temporary password:

Please click here to login and change your password.

Once you have changed your password, you can use the EXPERA Knowledge Community platform at https://expera.smartgridsplus.eu

You may apply for Expert membership if you fill in your profile page here.

If you have any additional questions or require assistance, please contact the site administrator at knowledgecommunity@eranet-smartenergysystems.eu

Kind regards,

Your EXPERA team



Login



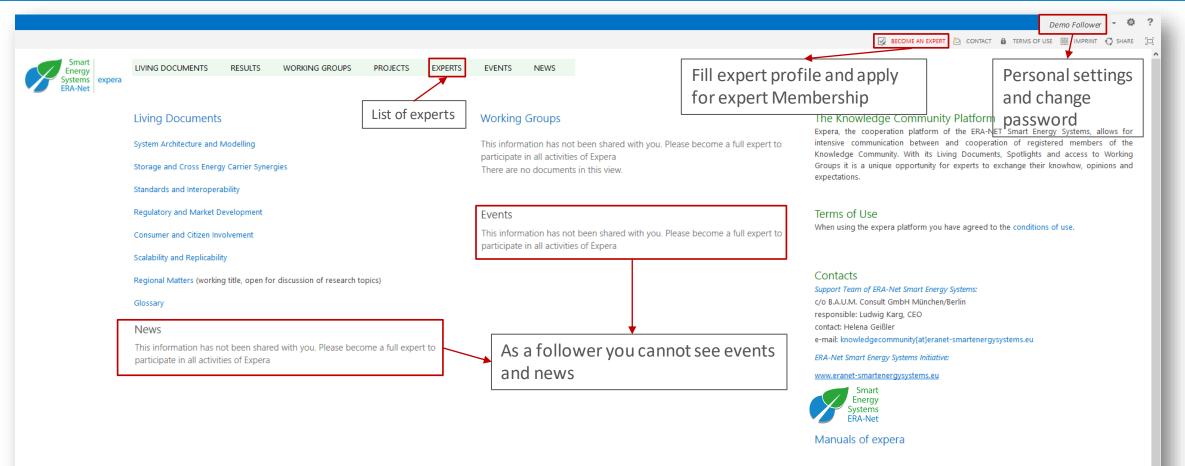
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Homepage





ERA-Net Smart Grids Plus is supported by funding from the European Union's Horizon 2020 research and innovation programme.





Upgrade to an expert membership

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Confirmation email upon your registration



• After your expert request has been approved, you'll receive this email:

Welcome as an expera expert!

We have evaluated your request and found that you can be a very valuable member of the ERA-Net SES Knowledge Community.

Please frequently use the services of expera and contribute to the Living Documents, the Working Groups and other ERA-Net Smart Energy Systems activities.

As a first step you may want to enter information about projects that you are or have been involved with. For that purpose please link to the expera project repository <u>here</u>.

For any questions please contact us at knowledgecommunity@eranet-smartenergysystems.eu.

Your Expera Support Team



Set the profile picture



Picture	Type the Web address: (Click here to test) http:// Type the description:	
1) Either provide image URL or upload an image	To include a portrait picture in your profile use two options: 1. upload an image using button below or 2. insert url directly to the image url field With uploading and/or copying the link you allow expera to show the picture to all registered followers and experts.	2.a) Press this button to upload the image from your computer
ListMeAsAnExpert	Durchsuchen Keine Datei ausgewählt. Set as profile image	2.b) Press save if you have provided image url
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Edit your expert profile



• Open your profile either via link supplied in an email or use link on a top menu

Full Name	Demo Expert		
Email Address			To save your changes
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Contribute your Knowledge

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How to find Living Documents



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	Living Documents	are available for	following topics (please	e click to oper	n the docun	nent):							
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	Storage and Cross	Energy Carrier S	ynergies										
	Standards and Inte	eroperability											
	Regulatory and Ma	arket Developme	ent										
	Consumer and Cit	izen Involvement	t										
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	Regional Matters (working title, op	en for discussion of res	earch topics)									
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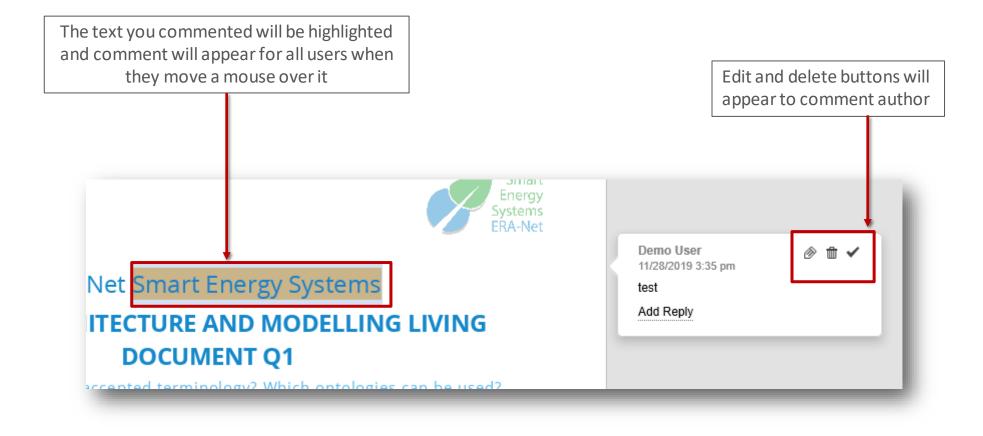
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What is your perspective on the presented approach? What is your perspective on the presented approach? Which vocabulary do you use? e e la mana la color da mana da color de este a come

user!









Become an editor



Smart LIVING DOCUMENTS RESULTS PROJECTS EXPERTS EVENTS NEWS WORKING GROUPS Enerav expera Living Document Users who Storage and Cross Energy Carrier Synergies would like to contribute to a living document Each living document has a chief editor, Chief Editor: Dr. Michael Stöhr (B.A.U.M.) might ask for responsible for the content. editing rights Expert Editors: Dr. Pia Saari (CLIC) To become an editor, you may request and become editing (next page) (expert) editors

Smart Energy and Smart Grids entail more than just a change of the electricity grid. Considering different energy carriers – heat, gas and electricity – and links between them can lead to better solutions in terms of technology and economy, and better serve those needs of people for whose provision energy is needed. Storage usually comprises conversion between different forms of energy and is often involved when linking different energy carriers. The legal and regulatory framework and the way how market interaction happens influences strongly which solutions can be realized and which are superior and which are not. Therefore, these issues are touched here, too.



Modify Living Documents (become an editor)



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Living Documents: commenting and discussion forums



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Smart LIVING DOCUMENTS RESULTS WORKING GROUPS EVENTS NEWS EXCHANGE PROJECTS EXPERTS Energy stems | expera Switch to other chapter of Living Document System Architecture and Modelling Request contribute rights Request editing rights Hide discussions **General Discussions** 2. Click here to add a new discussion 1. To participate in the dicussions and to new discussion
 comment the living documents click here Unanswered questions Recent My discussions distributed systems scale Centralised control is a single point of failure, which may be covered by several levels of redundancy to introduce the required robustness. Scalability is the issue ruling out centralised control of ever growing sustainance systems. Would anybody consider a centralised Router that manages the Internet?Besides, timeliness is a serious issue for operations technology. Real time means deterministic timing to ther received in a precisely defined amount of time. To achieve deterministic, strictly upper bound 2. To contribute in a current delays real time operating sys o big, efficient control may not be realiseable. If data volumes accumulate, processing discussion click on the subtitle of becomes the preventing bottlen where the speed of light is too slow to bridge distances within the required time for feasible control actions, and please the discussion By Gerald Franzl I guess at the end of Eranet SG +, we will find out. It will be very interesting which KPI we cann use to compare and might come up with ans answer depending on certain context conditions. By Mathias Uslar 7 March, 2017 Soute of the second sec SAM_Q4_System_Architecture_and_Modelling_Question_4.docx Q



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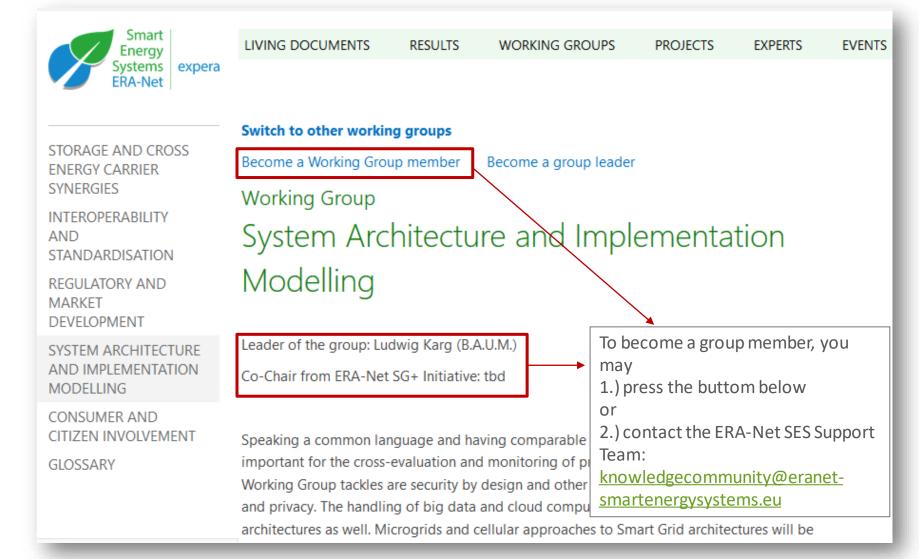


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Become member of the Working Groups

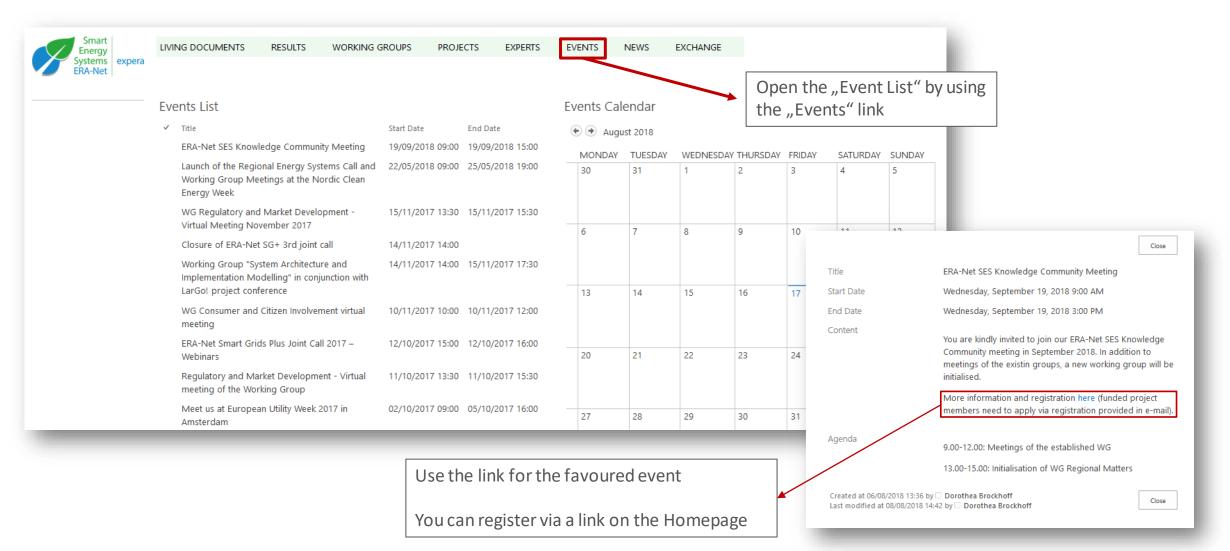






Register for Working Group Events







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Access WG documents (only for group editor members)

Smart Energy Systems ERA-Net expera	LIVING DOCUMENTS	RESULTS	WORKING GROUPS	PROJECTS	EXPERTS	EVENTS	NEWS	EXCHANGE			
STORAGE AND CROSS ENERGY CARRIER SYNERGIES INTEROPERABILITY	Switch to other working Become a Working Group Working Group	ip member	Become a group leader	mont							
AND STANDARDISATION REGULATORY AND			tizen Involve	ement							
MARKET DEVELOPMENT SYSTEM	Leader of the group: Helena Geißler Involving residential as well as commercial customers in Smart Grid trials has proven to be more difficult than expected just a few years ago.										
ARCHITECTURE AND IMPLEMENTATION MODELLING	Rewards and business cases remain difficult to define and a shared knowledge on how to approach, activate and engage the broad public in energy system of the future is crucial knowledge for all stakeholders in the core projects, the Steering Board, the Support Team as well as in external projects.										
CONSUMER AND CITIZEN INVOLVEMENT	for quantitative evaluati	on of their res	rojects have e.g. failed to sults. In general, reaching	out to and main	taining interest	t of the custo	mers has pro	oved to be more diffi			
GLOSSARY	routines. However, com	munity appro	ect participations through aches to engagement and will assemble already exi	d linking the top	ics of Smart Gr	ids and Smar	t Cities has o	often proved to deliv			

Working Group Meetings

(Event pages only for Experts)

	-

1st meeting of the Working Group on Consumer and Citizen Involvement

residential customers and to increase their flexibility and efficiency potentials.

Start Date End Date 16/06/2016 12:00 17/06/2016 13:0

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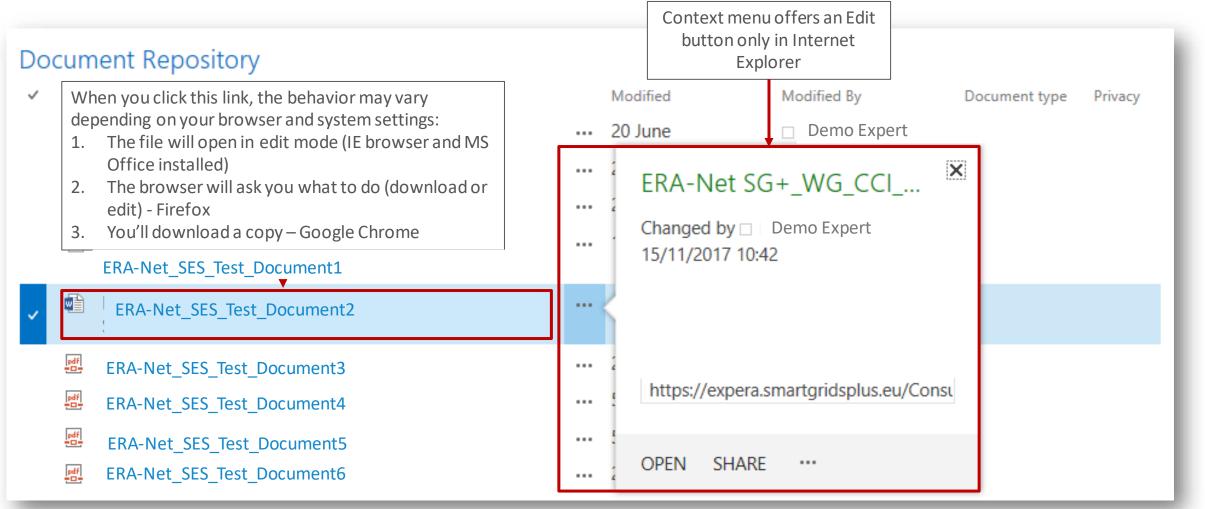
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-0-	ERA-Net SG+_CCI_virtual-meeting_161213_Q5		22 December, 2016
	ERA-Net SG+_WG_CCI_draft_sportlight_policy_brief_no.1_171027		15 November, 2017
	ERA-Net SG+_WG_CCI_draft_sportlight_policy_brief_no.1_171109		15 November, 2017
polf • Class	ERA-Net_SG+_expera_introduction		22 December, 2016
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Access WG documents (only for group editor members)







Accessing Policy Briefs/ Spotlights

LIVING DOCUMENTS RESULTS WORKING GROU

WORKING GROUPS PROJECTS

S EXPERTS EVENTS NEWS

Policy Brief: Recommendations from the ERA-Net SES Knowledge Community

The ERA-Net SES Knowledge Community unites scientific experts in smart energy systems. On the basis of their profound expertise, these researchers develope an informed opinion of key aspects which, according to their perspective, should be considered by policy makers. With its working groups, ERA-Net SES provides a platform for initiating and developing the expert discussions regarding the messages of the research community to the policy makers.

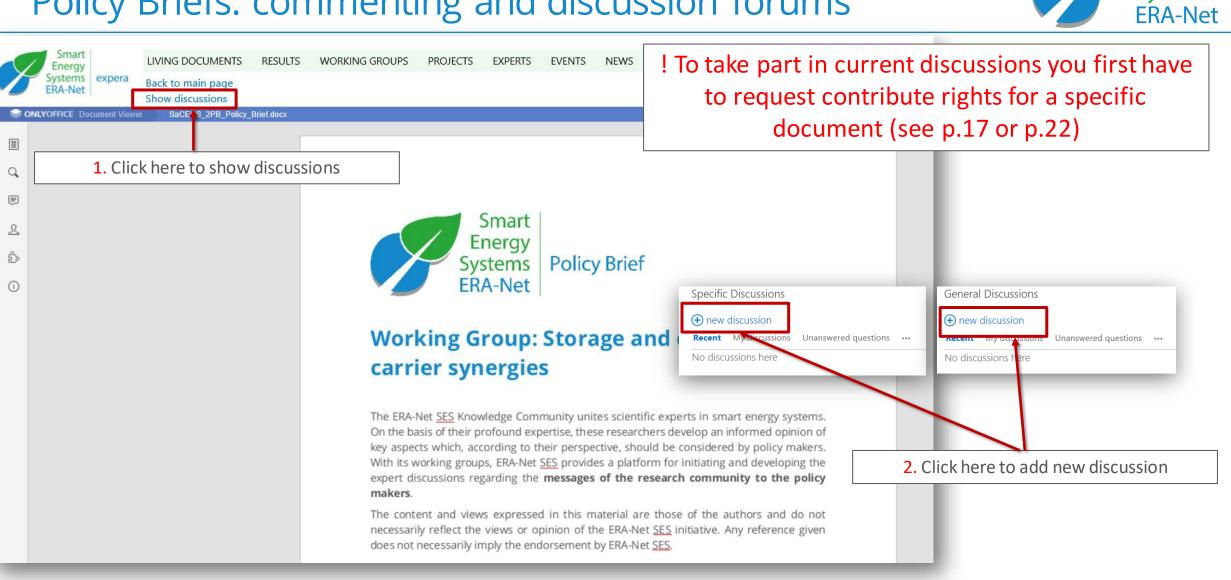
Policy makers and regulators are invited to share their perspective in our living documents, so the knowledge can be exchanged and evolve:

Spotlights

These newsletter-type documents will keep experts updated on the ongoing activities and intermediate results of ERA-Net Smart Energy Systems projects. In addition, they inform in a condensed manner about specific new knowledge. Spotlights concentrate on specific topics with high relevance for project participants and practitioners. In that sense, spotlights represent condensed versions and extracts from the ERA-Net SES Living Documents. Current Edition of Policy Briefs and Spotlights:

- System Architecture and Modelling, Standards and Interoperability (available soon)
- Storage and Cross Energy
- Carrier Synergies Regulatory and Market Development
- Consumer and Citizen Involvement

Policy Briefs: commenting and discussion forums





Smart

Energy **Systems**

Living Documents: commenting and discussion forums



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of ever growing sustainable systems leterministic timing to then mea- lelays real time operating system becomes the preventing bottlene ontrol actions, and please note t by Gerald Franzl 8 Nevember, 2017 guess	IO CONTRIDUTE IN a CURRENT po big, efficient control may r	ness is a serious issue for operations technology. Real time means and amount of time. To achieve deterministic, strictly upper bound not be realiseable. If data volumes accumulate, processing too slow to bridge distances within the required time for feasible				
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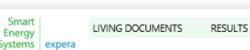
Share your projects

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PROJECT ALTERNATIVE VIEW	Project Re	epository		Search	ρ			
	elements of the proj	ects' profiles, not all elements are visible to all	Il users. While registered "expera followers" are allowed to see the project	r project with information and documents related to the very project. While the repository holds a cts' "passport data" only, "expera experts" have access to all project entries except personal data a o derive knowledge, but they are not entitled to use such protected items for other purposes.				
	Project leaders are invited to enter their project information or update existing entries. Please contact the support team to receive information on how to enter your project.							
	Use this <u>alternative v</u>	<u>view</u> to browse the project repository.		Use this link or <u>knowledgecommunity@eranet-</u> smartenergysystems.eu				
	Projects			to contact the support team, if you want to share your				
	✓ Acronym	Project Title (EN)	coordinator / lead (organisation) Abstract	project	ved			
		"SwiSS Transformer" – Solid State SiC Transformer	Fachhochschule Nordwestschweiz	2010				
		3.3kV SiC MOSFET and diodes for advanced power electronic systems	Paul Scherrer Institut	2018				
		Algorithmus zur Simulation diskontinuierlicher nonlinearer elektrischer Schaltungen	Eidgenössische Technische Hochschule Zürich	2010				

NEWS

EXCHANGE



ERA-Net



WORKING GROUPS

PROJECTS

EXPERTS

EVENTS





• Portal managers

Support Team of ERA-Net Smart Energy Systems: c/o B.A.U.M. Consult GmbH München/Berlin Responsible: Ludwig Karg Contact: Alisa Utz

E-mail: knowledgecommunity@eranet-smartenergysystems.eu



Funding Partners

Smart Energy Systems ERA-Net



This initiative has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreements no. 646039 and no. 775970.

