

European Tools and Methodologies for an efficient ageing management of nuclear power plant Cables

TeaM Cables General Assembly Meeting

27-29 March 2019, University of Bologna, Italy



First picture: Garisenda and Asinelli towers – Second: aerial view – Third: San Luca sanctuary

Objectives of the meeting

- Discuss some technical issues in more detail
- Make decisions and plan the upcoming work in each WP
- Follow-up on the decisions during an Executive Board meeting.

Meeting Venue and Contact details

	ARCES - Advanced research center on electronic systems "Ercole De Castro" Viale Carlo Pepoli, 3/2, 40123 Bologna	Contacts: Prof. Davide Fabiani +39 051 20 9 3509 davide.fabiani@unibo.it	Eng. Simone Vincenzo Suraci +39 051 20 9 3478 simone.suraci@unibo.it
--	------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------	----------------------------------------------------------------------------

Accommodation

The recommended hotel is <u>Hotel Re Enzo</u>, at a 10-minute walking distance from the meeting venue.

Address: Via Santa Croce, 26 - 40122 BOLOGNA Telephone: +39 051 523322 Telefax: +39 051 554035

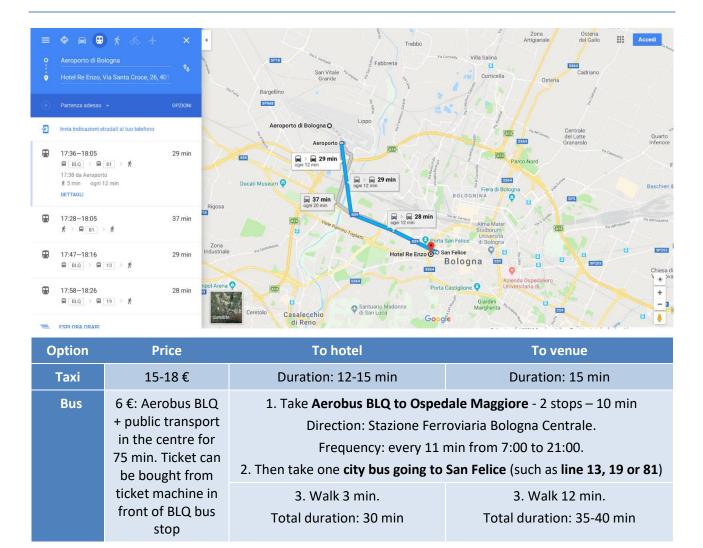
E-mail: info@hotelreenzo.it

Rates for single occupancy for 2 nights

Double/twin De Luxe room: 161 to 174 €

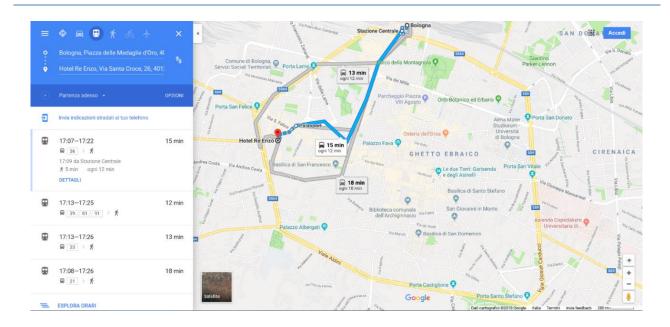
Rates include VAT, Breakfast buffet, Wi-Fi and luggage storage.





How to get to the hotel/meeting venue from Bologna airport

How to get to the hotel/venue from Bologna train station

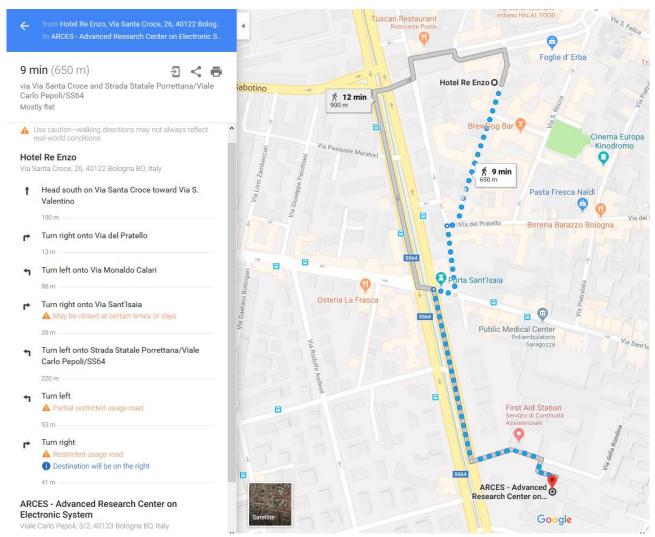


When arriving from the central station, exit at "Piazza delle Medaglie d'Oro".

To hotel	To venue
Duration: 12-15 min	Duration: 15-20 min
Take one city bus to Palasport (n. 39, 81, 91 or 21) or bus 33 to Vicini	Take one city bus to Porta Sant'Isaia (n. 36, 39, 81, 91, 33 or 21)
3. Walk 3-5 min	3. Walk 3-5 min

How to get to the meeting venue from the hotel

The meeting venue – ARCES – is at a **10-minute walking distance** from Hotel Re Enzo.

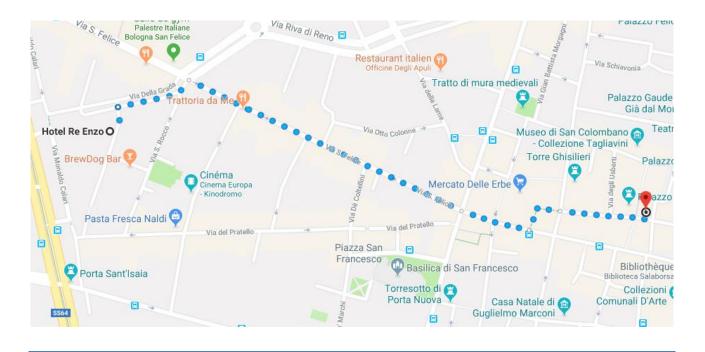


Day 1 – Wednesday 27th March: report on progress

Time	Item	Speaker
14:00 – 14:30	Arrival and registration	
14:30-14:45	Introduction and roundtable	All
14:45-15:45	WP2 progress	VIV
15:45-16:45	WP5 progress	VTT
16:45-17:00	Coffee break	
17:00-18:00	WP6 progress	FRA-G
18:00-18:30	WP7 progress	ART
19:30 – 22:30	Common dinner	

The common dinner will be held at the restaurant "Incrocio Montegrappa", Via Montegrappa, 7/d, Bologna. **Departure at <u>19:10</u> in front of Hotel Re Enzo** (15-minute walk).





Day 2 – Thursday 28th March: technical sessions

Time	Item	Speaker
09:00-09:30	WP3: General conclusions on the round robin tests	ENSAM
09:30-10:45	WP3 - Ageing characterisation at the molecular scale: EPR (15 minutes) Gas analysis (15 minutes) FTIR (15 minutes) UV (15 minutes) OIT (15 minutes)	INCT CEA ENSAM (+ IRSN?) ENSAM ENSAM (+ IRSN?)
10:45-11:15	WP3 - Ageing characterisation at the macromolecular scale: Swelling tests (15 minutes) DMTA (15 minutes)	ENSAM VTT
11:15 – 11:30	Coffee break	
11:30-12:00	WP3 - Ageing characterisation at the microscopic scale: DSC (15 minutes) SEM (15 minutes)	ENSAM (+ IRSN?) ENSAM (+ IRSN?)
12:00-12:45	WP3 - Ageing characterisation at the macroscopic scale: Electrical measurements (15 minutes) Indentation (15 minutes) EaB (15 minutes)	UNIBO (+ UJV?) ENSAM (+ VTT?) UJV (+ VTT?)
12:45 – 13:45	Lunch	
13:45-14:45	Lab visit	
14:45-15:05	WP3: Status of the database and recommendations to participants	AMU
15:05-15:45	WP3: First analyses of results using the PCA technics	AMU

Time	Item	Speaker
15:45-16:20	WP4: Microstructural characterization of stabilized XLPE: microstructure model proposition and consequences on kinetic modelling?	ENSAM
16:20-16:45	WP4: Radio-oxidation of stabilized XLPE: Impact of ATH fillers and consequences on elastic properties?	ENSAM
16:45 – 16:55	Coffee break	
16:55-17:20	WP4: Identification of activation energy of selected elementary reactions: AB initio approach and first results	CEA
17:20-17:55	WP4: Atomistic and finite-element modelling of the tensile test	VTT
17:55-18:20	WP4: Correlation between electrical response and polymer ageing (to be confirmed)	UNIBO
18:20-18:50	IZFP progress in WP3, WP4 and WP5	IZFP
18:50	End of meeting	

Day 3 – Friday 29th March: wrap-up

Time	Item	Speaker	Participants
09:00 - 09:30	WP1 presentation	EDF/ART	
09:30 - 10:00	WP2 wrap-up	VLU	
10:00 - 10:30	WP3 wrap-up	IRSN	
10:30 - 11:00	WP4 wrap-up	EDF	All partners (GA)
11:00 – 11:15	Coffee break		All partners (OA)
11:15 - 11:45	WP5 wrap-up	VTT	
11:45 – 12:15	WP6 wrap-up	FRA-G	
12:15 – 12:30	Wrap-up of meeting	All	
12:30 – 13:30	Lunch		
13:30 – 15:30	Executive Board meeting		WP leaders