

1ST MEETING OF STF516 WG2
“Mandate M/462 Efficient energy use in fixed and mobile ICT networks”

The meeting session is scheduled to start at
10.30 am Wednesday, 14th September 2016
and
end no later than 1.00 pm Thursday, 15th August 2016

ETSI
Sophia Anipolis
Room: Stravinski

DRAFT MINUTES

Wednesday 14 th September 2016 - Thursday 15 th August 2016			
10.30am	1	Opening of session	
		Mike Gilmore opened the session and welcomed the attendees.	
	2	Administrative matters	
	2.1	Attendance record/plan	All
		Attendees: Raffaele Bolla Daniel Dianat Mike Gilmore Hans-Otto Scheck Beniamino Gorini joined the meeting for a short while to confirm scoping of item 10.1.	
	2.2	STF matters	
		It was noted Daniel Dianat was missing from the information regarding STF 516 on the ETSI portal. The status of the experts is also missing and the “leader” is not differentiated. Action: MG to discuss with Thierry Comont	
	2.2.1	Contact list	All
		Contact points confirmed	
	2.2.2	Contracts and other matters https://portal.etsi.org/STF/STFs/Summary.aspx	All
	2.2.3	ETSI STF site https://portal.etsi.org/STF/stfs/STFHomePages/STF516	All
	2.2.4	Team Photo	All
		A photo was taken of the attendees present. This will form part of collage photo of all STF516 experts which will be placed on the STF web-page.	
	2.2.5	ETSI TAM	All
		Mike Gilmore will start using the TAM system to record work completed. A Webex or similar will be established to show all WG experts how to use the system based upon their allocated “days” for each package.	
	3	Documents Check via ETSI STF 516 DocBox https://docbox.etsi.org/STF/STF516_M462_EnergyEfficiency ETSI STF 516 WG1 DocBox https://docbox.etsi.org/STF/STF516_M462_EnergyEfficiency/STFworkarea/WG2/Documents	All
		Noted	
	4	Approve Agenda (document 01/01)	All
		Approved as document 01/01a	

	5	Confirm Minutes of Meeting xx	All
	6	Actions from Meeting xx	All
	7	Matters Arising from Meeting xx	All
	8	Review Minutes of Kick-off Meeting (document 01/02)	All
	8.1	Questions	All
		Noted and all questions answered	
	9	Incoming Reports	
	9.1	ETSI STF 516 Steering Group	
	9.2	ETSI EE (document 01/03 and 01/03a)	
		The response to 01/03 is recorded in 01/03a.	
	9.3	ETSI STF 516 WG1 (document 01/04)	
		Reviewed and noted. Next meeting dates listed in WG1 document 01/04.	
	9.4	ETSI STF 516 WG3	
		Meeting 1: 2 nd October in Helsinki, Finland	
	9.5	Other ESO input	
		None. Interim report to EC on Mandate M/462 is in WG1 document 01/04.	
	9.6	Other international standards input	
		None	
	9.6.1	ITU-T SGs	
		None	
	9.7	Other reports	
		None	
	10	Development of STF516 WG2 documents	
	10.1	DEN/EE-EEPS25 EN 303 472 Measurement Process for Energy Efficiency KPI for RAN Equipment	MG-RB- H-OS-DD 30% cover
		Discussion of document resulting in the following analysis RAN equipment is agreed as base stations and, to a much lesser degree, repeaters). Reason for focus on base stations is that 80% - 90% of mobile access network energy consumption lies within base stations. Which RAN equipment is listed? <ul style="list-style-type: none"> digital cellular base station equipment (distributed and integrated - referring to the nature of the RRU and BBU); repeaters (check 301 489-50 for definitions); supporting individually and combinations of: <ul style="list-style-type: none"> UTRA, WCDMA (IMT-2000 Direct Spread, W-CDMA, UMTS); E-UTRA, LTE (IMT-2000 and IMT advanced); GSM (IMT-2000 SC, Technology GSM/EDGE). The EN should be based on ES 202 706-1 which defines measurement methods (to ensure accuracy and comparison of energy consumption under defined throughput) together with measurement conditions under which the measurement are carried out under static conditions. These may vary with different RAN equipment. In addition the draft content of ES 202 706-2 which extends this to efficiency measurements under dynamic load conditions. The document should define how the measurement of energy consumption and traffic (measured "bits") is converted into the relevant KPI(s).	
	10.1.1	Introduction	
		Take elements of the above to create Introduction	
	10.1.2	Scope The document will define Energy Efficiency KPI for RAN Equipment [e.g. Base Transceiver Station (BTS), Remote Radio Unit (RRU), Base-Band Unit (BBU)] per technology 2G, 3G, 4G, 5G) and relevant process to	

		perform measurement and manage the KPI calculation	
	10.1.3	Action	
		<p>The current expertise is adequate and no further experts are required. However, the mix of resource needs amendment but this still leave the project under-spent/over-allocated. The unused portion may be allocated to the WG1 (to become WG2) activity on EN 305 200-2-3 which will allow extension of the activity of Hans-Otto Scheck and Daniel Dianat on that document (plus operational actors as requested by Dominique Roche).</p> <p>Take Word versions of 202 706-1 and -2 and create consolidated text for comment Deadline for draft 26th September 2016, comments by 28th October 2016.</p> <p>It is proposed that H-OS and DD increase their notional days for EN 303 472 to 20.</p> <p>It was proposed that task D08 EN 305 200-2-3 be moved into WG2 since MG and RB are already in WG2 and the contracts of H-OS and DD could be extended alongside new experts for operational systems in this area. This has no impact on WG1 since only a skeleton draft has been produced and a 2nd CfE is already planned.</p> <p>It is proposed that RB, H-OS and DD increase their notional days for EN 305 200-2-3 to 15.</p>	
	10.1.4	Check development schedule	
		Stable draft June 2017	
		ETSI GoToMeeting to discuss comments and next F2F	
	10.2	DEN/EE-26 EN 303 471 Energy efficiency measurement method and KPIs of Network Function Virtualization (NFV) applications in ICT networks	MG-RB-H-OS 100% cover
	10.2.1	Introduction	
		<p>ETSI EE have initiated work on “Energy efficiency measurement method of Network Function Virtualization applications” in a lab situation.</p> <p>No work has been done on operational aspects.</p> <p>EN 303 471 will extend the Objective KPIs of EN 305 200-2-2 (fixed access) and EN 305-200-2-3 (mobile access) when NFV is applied and to define the “boundaries” of such NFV implementations.</p>	
	10.2.2	Scope The present document specifies the method and metrics to determine the energy efficiency of Network Function Virtualization (NFV) applications. KPIs are also defined to determine the performances, in terms of energy efficiency, for the NFV applications	
	10.2.3	Action	
		<p>Another expert(s) will be required in a 2nd CfE so existing allocation is inadequate even though 100% is shown. It is proposed that 20 notional days are allocated to the new expert.</p>	
	10.2.4	Check development schedule	
		See 11.1	
		Stable draft June 2017	
	11	Outgoing Reports	
	11.1	Report to STF 516 Steering Group	
		<p>Progress report to be prepared 16th September</p> <p style="text-align: right;">Action: MG</p> <p>MG to attend TC ATTM for short time 8-10th November 2016. May be have a meeting on NFV project with RB in the same day.</p>	
	11.2	Other reports	
	11.2.1	Extension of list of outputs	
	12	DoNM and AOB	
	12.1	Date of next meeting	All

		Meeting 2: ??	
		ETSI GoToMeeting date to be established	
		Action: MG	
	12.2	AOB	All
		<p>It is proposed that WG2 takes responsibility for EN 305 200-2-2 (fixed access) and EN 305-200-2-3 (mobile access) and the skeleton drafts will be provided to the WG.</p> <p style="text-align: right;">Action: MG</p> <p>The extension of H-OS and DD contracts to cover EN 305-200-2-3 (mobile access) will be supplemented by the agreed WG1 action on 2nd CfE.</p> <p>The analysis of project funding allocation, contract extension and 2nd Call for Experts covering WG1 and WG2 activity will be prepared by MG and submitted to Alberto Berrini.</p> <p style="text-align: right;">Action: MG</p> <p>A document explaining the amendment of WG project allocation will be circulated to all WGs and TC officers.</p> <p style="text-align: right;">Action: MG</p>	

ANNEX A

Data provided by Alberto Berrini
Notional man-days in yellow highlight

Table A.1

Task	Title	EUR	ETSI Days	% activity allocated				Total Task
				RB	MG	DD	H-OS	
D09	Measurement Process for Energy Efficiency KPI for RAN Equipment EN 303 472	78,300	131	11 8.6k 14	3 2,3 k	4	13 10.2 k 13 days	31
D13	Energy efficiency measurement method and KPIs of Network Function Virtualization (NFV) applications in ICT networks EN 303 471	20,000	33	65 13.0k 21 days	10 2.0k		25 5.0k 6.25 days	100