

## M1 – System Test

Product: X95 Onyx EMEA variant  
Dual mode WCDMA/FDD 2100 MHz and  
GSM 900/1800/1900 MHz

PL-ST: Holger Abratis (BMG PHE RD ST PL)  
Mirko Virkus (BMG PHE RD ST PL)

Feature list: V0.0\_40; 25.01.2006

IP-planning: V1.0\_001

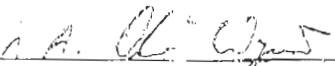
Appendix: Yes

This certificate is based on the MEP Document:

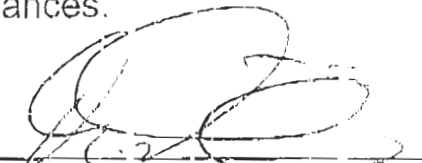
QMS Procedure Nr.: T008-MP issue 7.01 Published on 2005-07-13:

Choose the appropriate option and delete the other options (including this line):

Herewith M1-ST is passed with attached risk assessment and list of  
accepted non-compliances.



KLF, 15.03.2006, PL-ST: Holger Abratis



KLF, 15.03.2006, Co PL-ST: Mirko Virkus



KLF, 15.03.2006, Head of ST: Dr. Klaus Wacker



MCH, 15.03.2006, Director of PL-STs: Klaus Friedl

Appendix:1. Checklist (from MEP):

System test (ST)	ST-PL
1 Test Plan available (BBIT, system test) .....	Mirko Virkus, 15.03.06 o.k.
2 Test specification and planning, testability of all features ensured (test benches, ext. test houses, radio net, radio net manufacture ...) or identification of non-testable features .....	Holger Abratis, 23.02.06, non-compliant see remarks in section 2
3 Planning of agreed conformity assessment (R & TTE, FCC) and certification (GCF, PTCRB etc.) created and ensured .....	Holger Abratis, 23.02.06, - R&TTE: o.k. - GCF: non-compliant see remarks in section 2 - FCC: no ST task anymore - PTCRB: not required acc. to CPM
4 Planning of agreed certification, conformity (e.g. MMS, WAP, KJAVI, Sync ML...) created and ensured .....	Mirko Virkus, 23.02.06 non-compliant see remarks in section 2 for IMPS and VT see additionally remarks in section 3
5 Test planning "Radio Communication Device with Accessories" coordinated between Accessories and Device .....	Mirko Virkus, 23.02.06 o.k.
6 Responsibility for the system test (device/accessories) is fixed .....	Mirko Virkus, 23.02.06 o.k.
7 Agreement between PM, System Test (ST) and PQA how to organize the trial for the project (development trial for new technologies, strategic operator trial to speed up the operator approval; Interoperability test for new technologies planned and ensured) .....	Holger Abratis, 23.02.06, o.k. (as Kestrel)
8 Detailed Primavera project plan up to M3/S4 is available, showing dedicated resources by name and on department level for external consultants	Holger Abratis, 23.02.06, non-compliant see remarks in section 2
9 Definition of key operators for customer/vendor interoperability test (for all new technologies which require customer/vendor interoperability test) received from PM	Holger Abratis, 23.02.06, o.k. (no OT needed, only Operator Approval (ST) and Field Test (QM))
10 Definition of the key operators (ordered by priority) that are supported during operator approval received from Global Product Management	Holger Abratis, 23.02.06, o.k. 1. C2 2. TMO 3. VF
11 Number of SW variants for the key operators received	Mirko Virkus, 15.03.06 o.k.

	from Global Product Management	(for the moment internal onal (EMEA) only; Chinese and Arabic language group will not be supported with QCT_6250A chipset
12	Definition which other operators (besides key operators, ordered by priority) and to which extent these operators are supported during operator approval received from Global Product Management	Holger Abratis, 23.02.06, o.k. (CFM asks for one additional person for local support when necessary, e.g. for TIM or H3G)
13	Received plan for availability of SIM cards needed for operator approval support by Global Product Management	Holger Abratis, 23.02.06, o.k. (Will be provided by CFM based on necessity)
14	Type and application approvals required for DS have to be defined considering requirements from PM	Holger Abratis, 23.02.06, o.k. (as Kestrel: R&T E, GCF incl. Application Enabler like MMS, V*, IMPS, FCC/C (by EA), BT, USB, Java, CV Browser, CV MMS
15	Time schedule for reception of devices for conformity assessment and certification agreed with Radio, EMC/Antenna, Digital and mixed signal HW	Holger Abratis, 23.02.06, - Radio: not necessary as in KLF ST-MO perform TA-sample selection on conducted basis - EMC/Antenna: o.k. - Digital and mixed signal HW: aligned as audio is under control of BB itself

## 2. Non-compliances (non compliant to MEP):

Description of Non-Compliance	Agreed Action Plan (Who? What? By When?)
Still missing SW IP planning and therefore influence on given timeline not determinable → also relevant for Primavera planning	Check items again with M1 SW availability, planned for 13.03.06; a rough IP planning is available, but final IP planning will be done in Primavera, Primavera planning of SW is ongoing; will be finalised till the 17.03.2006
Late delivery of Qualcomm AMSS version V6.3.10 at 30.06.06 will cause availability of TA SW freeze later than required for Pre-TA test phase (04.07.06) as implementation at BinQ will take 4-5 weeks add-on	SW tries to convince Qualcomm to keep on patch delivery based on AMSS version V6.2.9.x for compliance to GCF03.22 and GCF03.23 as well; next meeting is planned for 16.03.06 evening; all agreements are based on a "gentleman agreement", there will be no written agreement available

ST-to-SW requirements not committed by SW so far	Currently not aligned between PL SW and PL ST; will be finalised till 17.03.2006

### 3. Additional ST Risks:

Risk Description	Agreed Action Plan (Who? What? By When?)
Please see attached risk list: "ST_Risk_Assessment_Onyx_Update_for_Pre-M1_060315.xls" of 15.03.06	





R9	JSR 184 TCK version 1.1 must be implemented, version 1.0 is only valid until the 26.06.05	Java Certification not possible anymore	high	20% (M0) --> 80% (M1 HW)	SW is already informed and verifies asap if version 1.1 is possible for Onyx	PL-SW, PL-ST	S0 --> M1	Not committed up to now by SW; availability of testcases must be checked in the meantime; Jan Eichholz is tracking this issue; currently there was a verbal agreement that OCT will support this JSR version, should be escalated to OCT by G. Moser
R10	Qualcomm will focus on the specific version 03.22 for GCF compliance instead of the relevant core specifications. If timeline of GCF version 03.22 will not meet we and Qualcomm will be confronted with absolutely new testcases on which we have no experience up to that stage and in addition Qualcomm may refer to the contract of delivering GCF version 03.22 compliant software only	Delay on DS	Fatal (M0/S0) --> serious (M1 HW)	50% (M0/S0) --> 30% (M1 HW)	Take care also for compliance to further GCF versions after 03.22 in contracts of Qualcomm in upfront Change to GCF versions 03.23 already with first SW delay which affects the protocol stack and the lower layers or has an impact on the SW stability.	TPM, PL-SW	S0 --> M1	Support related to GCF03.23 is not given up to now - commitment outstanding; GCF03.22 o.k.
R11	Timeline of Koala, SwanApoxi will be nearly identical to Onyx. Testsystems and human resources within ST will not be sufficient anymore	Delay on DS	serious (M0/S0) --> minor (M1 HW)	70% (M0/S0) --> 10% (M1 HW)	Get a prioritisation of this 3 projects from the management	TPM, PL-ST	M1	Koala cancelled, Swan APOXI cancelled --> therefore no conflict should be given anymore; Swan naive / Chameleon could possibly cause conflicts
R12	TA relevant changes are necessary after B1++ in contradiction to our timeline assumptions	Delay on DS	serious	20%	?	PL-BB, PL-RF, PL-EA	S3 HW	
R13	SW is not able to deliver TA SW freeze until 04.07.06	Delay on AS, DS	serious	50% (M0/S0) --> 40% (M1 HW)	Get commitment from Qualcomm and all other affecting sources that Pre-TA tests can be started with SW available on 04.07.06 - later changes will not have any influence on TA relevant tests and SW stability will increase only at that stage	PL-SW	M1	see R7
R14	GCF Version 03.22 actually planned to be valid until 24th of October 2006 will be shifted to an earlier period	Actual timeline to get GCF approval focused on version 03.22 will not fit anymore	Fatal (M0/S0) --> minor (M1 HW)	10% (M0/S0) --> 5% (M1 HW)	Trace GCF planning and inform Qualcomm as soon as possible; force Qualcomm to take care for future GCF versions, too - possibly with additional people and in parallel to period of version 03.22	TPM, PL-ST	M1	No changes of dates during last meeting on 25/26. January (= GCF 03.21) --> therefore shifting to earlier dates of upcoming validity periods for 03.22 and 03.23 will become more and more unlikely
R15	R&TTE compliance not reached at milestone PS	Possibly delay on shipment of mobiles to network operator (official IMEI's must not get into the market without admission of authority)	low	50%	Take care that mobiles will not be delivered to customer without R&TTE approval	TPM	PS	
R16	China TA not considered up to now in the actual timeline although the activity is named already in the Primavera plan	Management may regard the date in Primavera as verified	low	10% (M0/S0) --> 0% (M1 HW)	Inform management in upfront that the APAC variant will be planned in a later stage	TPM	M0 APAC or S0	CPM will raise CR if APAC will become necessary but is now out of focus for this declaration; final decision: OCT_6250A platform will not support chinese and/or arabic language groups
R17	With GCF 03.21 Video Telephony testcases and IOP will be valid, currently there exists no test environment in MCH to perform these conformance tests and it is not clear which know-how is necessary	It must be clarified how to realize the test environment and how to train the expert to perform the in-house tests	medium	50%	Take care that necessary environment and equipment will be available just in time; invest must be discussed with management	PL-ST	S2	LM in MCH is tracking this issue to order a valid test system; Currently GCF has no valid test system declared
R18	With GCF 03.21 IMPS IOP will be valid, currently there is no experience in MCH to perform these conformance tests and it is not clear which know-how is necessary; also it is not clear if GCF03.21 conformance test will be valid possibly till GCF 03.22 or later	It must be clarified how to train the expert to perform the tests	medium	50%	Train the testers by performing the tests in upfront - if necessary with other products like Kestrel	PL-ST	S2	
C1	Completely integrated and 100% bugfree SW in respect of all type approval relevant and certification issues (like R&TTE, GCF V3.23 x, BT, WAP, MMS, KJava, Download, USB, SyncML, Video etc.) 6 weeks before type approval start (AS TA)							
C2	Support of Qualcomm in case of downgrading incorrect testcases (incl. failure analysis with Onyx)							
C3	Milestone S3 is passed before TA start (AS TA)							
C4	Final version of AMSS for Onyx integrated and delivered to ST latest 6 weeks before S25 and minimum 10 weeks before planned Pre-TA session							
C5	Application testruns have no room for bug fixing and re-test - means minimum of 90% passed rate with 100% testcoverage based on the different milestones must be reached with first try							
C6	Local bugfix for remaining failed testcases must be available within 2 days and official sw version with implemented bugfix latest 3 days later (overall time = 1 week after failure detection)							
C7	B1++ hardware is identical to B2 regarding RF conducted measurements and timing. B2 is the latest hardware version in any case							
C8	ST will be delivered with new hardware samples from the assembly shop prior first and with total amount of order							
C9	Automation (Qualcomm's named "Low Power Mode": switch on and off of testruns must work from the beginning of sw deliveries							