

TOOL SUMMARY FORM (PER TOOL)

[illegible]

SINGLE TEST RECORD FORM

Test No:9	Profile edition No:1	Tool:Integral 7	Score:4
Test files:			
Import		Export	
ENTSO-E16nodes_part_BE_v11July_EQ.xml ENTSO-E16nodes_part_BE_v11July_SV.xml ENTSO-E16nodes_part_BE_v11July_TP.xml ENTSO-E16nodes_part_NL_v11July_EQ.xml ENTSO-E16nodes_part_NL_v11July_SV.xml ENTSO-E16nodes_part_NL_v11July_TP.xml ENTSO- E_Boundary_Set_4_May_2011_EU_EQ.xml ENTSO- E_Boundary_Set_4_May_2011_EU_TP.xml		ENTISOE_16_IN_11J1525h_BE_EQ.xml ENTISOE_16_IN_11J1525h_BE_TP.xml ENTISOE_16_IN_11J1525h_EU_EQ.xml ENTISOE_16_IN_11J1525h_EU_SV.xml ENTISOE_16_IN_11J1525h_EU_TP.xml ENTISOE_16_IN_11J1525h_NL_EQ.xml ENTISOE_16_IN_11J1525h_NL_TP.xml	
Comments/Results/Issues:			
- Integral 7 does not support that generators regulate the voltage of a remote node. Therefore the target voltage of the regulation was automatically recalculated and set for the generator node itself. - CIMDesk did not report any errors on the exported files.			
Supplementary files:			
Power Flow ENTISOE_16 1st Edition Integral.pdf			
Date	Vendor	Test witness	
12.07.2011	Name: Dirk Cremer	Name: Matthias Jäkel	
	Signature	Signature	



TOOL SUMMARY FORM (PER TOOL)

[illegible]


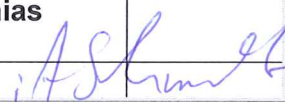
SINGLE TEST RECORD FORM

Test No:1	Profile edition No:2	Tool:Integral 7	Score:3
Test files:			
Import		Export	
ENTSOE_16_BE_SV.xml ENTSOE_16_BE_EQ.xml ENTSOE_16_BE_TP.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO-E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml		No export in this test	
Comments/Results/Issues:			
- currently no *.zip import available - Integral 7 does not support that generators regulate the voltage of a remote node. Therefore the target voltage of the regulation was automatically recalculated and set for the generator node itself. - The ratedS of the three-winding transformer do not match the impedances. To avoid plausibility errors, the ratedS are recalculated automatically to get plausible uk%-values			
Supplementary files:			
Power Flow ENTSOE_16 BE 2nd Edition Integral with voltage regulation at xnodes.pdf Power Flow ENTSOE_16 BE 2nd Edition Integral without voltage regulation at xnodes.pdf			
Date	Vendor	Signature	Test witness
12.07.2011	Name: Dirk Cremer	Name: Matthias Jäkel	Signature




SINGLE TEST RECORD FORM

Test No:2	Profile edition No:2	Tool:Integral 7	Score: 3
Test files:			
Import		Export	
ENTSOE_16_BE_SV.xml ENTSOE_16_BE_EQ.xml ENTSOE_16_BE_TP.xml ENTSO- E_Boundary_Set_28_June_2011_2ndEdition_EU_E Q.xml ENTSO- E_Boundary_Set_28_June_2011_2ndEdition_EU_T P.xml		ENTSOE_16_IN_12J1545h_BE_EQ. xml ENTSOE_16_IN_12J1545h_BE_TP. xml ENTSOE_16_IN_12J1545h_EU_EQ. xml ENTSOE_16_IN_12J1545h_EU_TP. xml ENTSOE_16_IN_12J1545h_EU_SV. xml	
Comments/Results/Issues:			
- currently no *.zip import/export available - Integral 7 does not support that generators regulate the voltage of a remote node. Therefore the target voltage of the regulation was automatically recalculated and set for the generator node itself. - The ratedS of the three-winding transformer do not match the impedances. To avoid plausibility errors, the ratedS are recalculated automatically to get plausible uk%-values CIMSpy does not report any errors.			
Supplementary files:			
Date	Vendor	Test witness	
12.07.2011	Name: Dirk Cremer	Signature	Name: Matthias Jäkel
			



SINGLE TEST RECORD FORM

Test No:3	Profile edition No:2	Tool:Integral 7	Score:3
Test files:			
Import		Export	
ENTSOE_16_BE_SV.xml ENTSOE_16_BE_EQ.xml ENTSOE_16_BE_TP.xml E_Boundary_Set_28_June_2011_2ndEdition_EU_EQ.xml ENTSO- E_Boundary_Set_28_June_2011_2ndEdition_EU_TP.xml			
Comments/Results/Issues:			
- currently no *.zip import available			
Supplementary files:			
Power Flow ENTSOE_16 BE 2nd Edition Integral with voltage regulation at xnodes.pdf ODMS_Loadflow_BE.jpg			
Date	Vendor	Signature	Test witness
12.07.2011	Name: Dirk Cremer	Name: Matthias Jäkel	Signature
			

SINGLE TEST RECORD FORM

Test No:9	Profile edition No:2	Tool:Integral 7	Score:3
Test files:			
Import		Export	
ENTSOE_16_BE_EQ.xml ENTSOE_16_BE_SV.xml ENTSOE_16_BE_TP.xml ENTSOE_16_NL_EQ.xml ENTSOE_16_NL_SV.xml ENTSOE_16_NL_TP.xml ENTSO- E_Boundary_Set_28_June_2011_2ndEdition_EU _EQ.xml ENTSO- E_Boundary_Set_28_June_2011_2ndEdition_EU _TP.xml		ENTSOE_16_IN_12J1700h_BE_EQ.xml ENTSOE_16_IN_12J1700h_BE_TP.xml ENTSOE_16_IN_12J1700h_EU_EQ.xml ENTSOE_16_IN_12J1700h_EU_TP.xml ENTSOE_16_IN_12J1700h_EU_SV.xml ENTSOE_16_IN_12J1700h_NL_EQ.xml ENTSOE_16_IN_12J1700h_NL_TP.xml	
Comments/Results/Issues: - Currently no zip import/export - For the exported files, CIMDesk showed three minor errors (see document CIMDesk Errors.docx). These could be corrected in the program.			
Supplementary files: Power Flow ENTSOE_16 2nd Edition Integral.pdf CIMDesk errors.docx			
Date	Vendor	Test witness	
12.07.2011	Name: Dirk Cremer 	Name: Matthias Jäkel 	Signature 

SINGLE TEST RECORD FORM

Test No:10.1	Profile edition No:2	Tool:Integral 7	Score:3
Test files:			
Import		Export	
ENTSOE_16_IN_12J1700h_BE_EQ.xml ENTSOE_16_IN_12J1700h_BE_TP.xml ENTSOE_16_IN_12J1700h_EU_EQ.xml ENTSOE_16_IN_12J1700h_EU_TP.xml ENTSOE_16_IN_12J1700h_NL_EQ.xml ENTSOE_16_IN_12J1700h_NL_TP.xml ENTSOE_16_IN_12J1700h_EU_SV.xml			
Comments/Results/Issues: - currently no *.zip import/export available			
Supplementary files: Power Flow ENTSOE_16 2nd Edition Integral exported and reimported.pdf			
Date	Vendor	Test witness	
14.07.2011	Name: Dirk Cremer	Name: Marcel Forlong	
	Signature 	Signature 	

SINGLE TEST RECORD FORM

Test No:8.1	Profile edition No:2	Tool:Integral 7	Score:3
Test files:			
Import		Export	
IEC60909-4_CIM-Test_A1_NE_13J14h_EQ.xml		IEC60909_IN_13J1620h_A1_EQ.xml	
IEC60909-4_CIM-Test_A1_NE_13J14h_TP.xml		IEC60909_IN_13J1620h_A1_TP.xml	
IEC60909-4_CIM-Test_A1_NE_13J14h_SV.xml		IEC60909_IN_13J1620h_EU_SV.xml	
Comments/Results/Issues:			
<p>- currently no *.zip import/export available</p> <p>- The 3phase short circuit calculation leads to slightly different results than reported in the IEC60909. It was found out that this was caused by BCP exporting some values in PU while the Profile described them as engineering values.</p> <p>- Exporting and reimporting the data leads to the same short circuit results.</p>			
Supplementary files:			
Short Circuit 3ph IEC60909 imported from BCP.pdf			
Date	Vendor	Test witness	
14.07.2011	Name: Dirk Cremer	Name: Marcel Forlong	
	Signature	Signature	

SINGLE TEST RECORD FORM

Test No:8.2	Profile edition No:2	Tool:Integral 7	Score:3
Test files:			
Import		Export	
IEC60909-4_14J12h_EQ.xml		IEC60909_IN_14J1045h_Network_EQ.xml	
IEC60909-4_14J12h_TP.xml		IEC60909_IN_14J1045h_Network_TP.xml	
IEC60909-4_14J12h_SV.xml		IEC60909_IN_14J1045h_EU_SV.xml	
Comments/Results/Issues:			
<p>- currently no *.zip import/export available</p> <p>- The 3phase short circuit calculation leads to the same results as reported in IEC60909. Single phase short circuit calculation leads to slightly different results than reported in IEC60909. The difference is less than 1%.</p> <p>- Exporting and reimporting the data leads to the same short circuit results.</p> <p>- DIgSILENT imported the files exported by FGH without errors. 3phase and single phase short circuit calculation lead to the same results as reported in IEC60909.</p>			
Supplementary files:			
Short Circuit 3ph IEC 60909 imported from DIgSILENT.pdf			
Short Circuit 1ph IEC 60909 imported from DIgSILENT.pdf			
Date	Vendor	Test witness	
14.07.2011	Name: Dirk Cremer	Name: Marcel Forlong	
	Signature	Signature	