

**IT consultancy services for the implementation of the Agency's  
REMIT Information System (ARIS) for the Agency for the  
Cooperation of Energy Regulators**

**Multiple Framework Contract**

Agency's ICT Standards

**OPEN CALL FOR TENDERS  
ACER/OP/MMD/09/2013**

## Methodology & Techniques:

<i>Description/Function</i>	<i>Primary System Method/Tool</i>	<i>Exception System Method/Tool (s)</i>	<i>Comment</i>
<b>Iterative</b> development approach	Rational Unified Process at the Agency (RUP@EC)		
<b>Programming</b> design approach	SOLID		
Results of analysis and design expressed	Unified Modelling Language, UML		
<b>Risk driven</b> iteration scheduling			Highest risks first
Software development methodology	OOA+OOD	Functional Approach (legacy systems)	
User requirements captured and described	Use Case Modelling. Functional/NonFunctional split		

## Tools and Techniques:

<i>Description/Function</i>	<i>Primary System Method/Tool</i>	<i>Exception System Method/Tool (s)</i>	<i>Comment</i>
Analysis and design tool	None preferred		
Integrated development environment (IDE)	None preferred		
PL/SQL code	None preferred		
DB design	None preferred		
Development of small database applications	.NET/SharePoint. MS SQL server		
Data Warehousing (ARIS)	TBD.		Oracle under
Data Warehousing Market Monitoring Software (Within ARIS)	Proprietary. Nasdaq OMX SMARTS		
Version control system	None preferred		
Defect tracking	None preferred		

Testing and Quality			
	Unit testing for Java development	None preferred	
	Formal software testing (Integration, System, Regression, etc.)	None preferred	
	HTML, CSS Validation	W3C Validation	
	Quality control	None determined	
	Performance testing	None determined	
	Enterprise Project Management system (EPM)	Microsoft Project Server 2010	
Project Planning and Management		None determined	
Reporting Tool		None determined	
Software configuration management			
Independent Quality Assurance			
Service Desk System		MS InfoPath. Self-developed and outsourced in a second phase	
Workflow Tools		MS InfoPath	
Survey tool		None determined	
HTML Editing Tool		None determined	
URL testing tool		None determined	
Virtual meetings tool		Juniper Secure Meeting	
Help generation tool		None determined	
Animated demo tool		None determined	
Forum software solution		None determined	
Search engine		None determined	
Search engine embedded in applications		None determined	
PDF Forms design		Adobe acrobat X pro	
PDF Forms automation		None determined	
<b>Exchange Standards</b>			
Transactional			

## Main Architecture:

<i>Description/Function</i>	<i>Primary System Method/Tool</i>	<i>Exception System Method/Tool (s)</i>	<i>Comment</i>
<b>Operating Systems</b>			
Server operating systems (ARIS)	RedHat Enterprise Linux AS 5.x	RedHat Enterprise Linux AS 6.x Windows 2008r2 Server	
Server operating systems (general)	Microsoft Windows 2008r2	CentOS linux 6.x	
Laptop operating system	Windows 7	MacOS	
PDA	iPhone. Android		
Desktop operating system	Windows 7		
<b>Application Servers for ARIS</b>			
<b>Third Tier</b>			
RDBMS and Clustered RDBMS	Oracle 11g/11g/12c with or without RAC	Oracle In-Cache Memory Data Base	
LDAP Directory	Active Directory for Windows 2008 and superior		
<b>Second Tier</b>			
Clustered Application Server implementing J2EE (Web and EJB containers, etc)	RedHat JBoss	Oracle Web Logic server to achieve performances. Any solution compliant with JSR-318 and JSR-343	
Portal	LifeRay Portal Community and Enterprise Portal with use of Kaleo for Workflows	Microsoft SharePoint Server	
Stand-alone Web Server	Apache Web Server/Apache Tomcat Web Server		

Database access	JDBC Tier 4, Hibernate and DB Access through the Java Application Server	JDBC Tier 1 and 2 for retrieving LOBs out of a container, where possible, using the Hibernate APIs	
Data Interchange and ORM	--	--	
Data interchange protocol	SQL on Secure or unsecure TCP/IP	--	
Data interchange validation	Not yet defined	--	
Data interchange business rule validation	Not yet defined	--	
<b>First Tier</b>			
Thin client standards, using standard web browsers	Internet Explorer from version 5.5, Mozilla FireFox, Google Chrome, Safari		
Presentation server side libraries	Spring framework and Struts Framework implementing MVC		
Rich Internet Application	Ajax and Java Scripts both with JQuery		
On Line forms	Use of all technologies mentioned before, plus, use of LifeRay		
The Agency Standard Client Build			
PDF Reader	Adobe Acrobat Reader Version X		
Rich content browser plugin	Adobe Flash Player Version 10.0		

## IT Services Tools:

<i>Description/Function</i>	<i>Primary System Method/Tool</i>	<i>Exception System Method/Tool (s)</i>	<i>Comment</i>
<b>Document Management</b>			
Electronic document management system	Microsoft SharePoint Server 2010		
<b>Software Distribution/Deployment</b>			
Windows software deployment	Microsoft system centre 2012		

<b>Networking and Security</b>			
Cascaded firewalls	Checkpoint		Version NGAi
Intrusion detection systems	Checkpoint		
Penetration Test	none		
Anti-Virus software	McAfee		
Anti-Virus services	McAfee		
User authentication and authorisation	Microsoft Windows domain services Vasco Token radius		
Security Encryption	AES (IP SEC)		
Media Encryption	None		
Standard for electronic data exchange	XML, Web Services based on Apache CXF and REST compliant (JSR-311)		
<b>Communications Protocols</b>			
Transmission level	TCP/IP		
Web connectivity	HTTP; HTTPS		
Video Conferencing	H.323. only TCP/IP		MCU up to 4
Web streaming			Considering external
Virtual meetings	Juniper Secure Meeting		
<b>Character Encoding</b>			
UTF8 (as a minimum)			

## Standards:

<i>Description/Function</i>	<i>Primary System Method/Tool</i>	<i>Exception System Method/Tool (s)</i>	<i>Comment</i>
<b>Management Systems</b>			
Quality	ISO 9001:2008		Not certified
IT Service Management	ITIL v3 ISO20000:2011		Not certified
Information Security	ISO27001:2005		Not certified