

**Project Title** Developing a Quality Assurance and Quality Control Programme for the Clinical Use of Advanced Radiotherapy Techniques

**Oracle Project Number** 2061227

**Objectives** To improve radiation safety of patients by establishing mechanisms and methodologies for the implementation of QA/QC for advanced radiation therapy techniques in clinical use in Croatian radiotherapy centres.

### **General Project Data**

**Field(s)** (29) Dosimetry and medical physics

**Project Achievements**

**ACC Sector** Core **Project Status** Active

**Original Funding** Core **1st Year Of Approval** 2014

**Estimated Duration** 2 year(s)

### **IAEA Personnel**

<b>Programme Management Officer</b>	CHUPOV, Andrei	TCEU	Europe Section 2
<b>Section Head</b>	SALMINS, Andrejs	TCEU	Europe Section 2
<b>Technical Officer(s)</b>	HEALY, Brendan James	NAHU	Dosimetry and Medical Radiation Physics Section

### **Recipient Institutes and Counterpart(s)**

Croatia	University J.J. Strossmayer; University J.J. Strossmayer; Medical Faculty; Osijek (FAJ, Dario)
Croatia	University Hospital Osijek; Department of Oncology and Radiotherapy; Osijek (KASABASIC, Mladen)
Croatia	University Clinical Hospital Rijeka; Rijeka (JURKOVIC, Slaven )

**Current Year Financial Status**

Fund	Component	Current Year Disbursement	Current Year Unliquidated Obligation	Previous Year Disbursement	Previous Year Unliquidated Obligation	Current Year Implementation	Total Implementation	Total Disbursement
	<b>Grand Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>

**Financial Approvals**

**Core Approvals**

Year	Experts	Meetings/Workshops	Fellowships	Scientific Visits	Training Courses	HR Total	Equipment	Subcontracts	Miscellaneous	PR Total	Total Approval
2014	0.00	0.00	10,800.00	14,400.00	0.00	25,200.00	36,600.00	0.00	0.00	36,600.00	61,800.00
2015	0.00	10,000.00	0.00	0.00	0.00	10,000.00	35,000.00	0.00	0.00	35,000.00	45,000.00

**Footnote Approvals**

Year	Experts	Meetings/Workshops	Fellowships	Scientific Visits	Training Courses	HR Total	Equipment	Subcontracts	Miscellaneous	PR Total	Total Approval
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**Experts**

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)
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**Meetings/Workshops**

Task	Task title/Participant Name	Nationality	Candidate approached	Submitted:s Accepted:a	Withdrawn:w Rejected:r	Start Date	End Date	Duration (days)
<b>9001</b>	<b>To attend Radiobiology &amp; radiobiological modelling in radiotherapy course 2015</b>							
	<b>Mission 01</b> JD Submitted: 2014-11-24							
	Duty Station : Elsewhere( UK ; Elsewhere , UK )							
	MRCELA, Iva	CRO	2015-02-12			2015-03-22	2015-03-26	4
	MLINARIC, Mihaela	CRO	2015-02-12			2015-03-22	2015-03-26	4

Field: 29

**Fellowships**

No	Name	Nominated	Awarded:a Non-awarded:n Withdrawn:w	Host Country	Type	Proposed:p Accepted:a Rejected:r	Anticipated Start Date	Start Date	End Date	Proposed Duration
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**Scientific Visits**

No	Name	Nominated	Awarded: Non-awarded: Withdrawn:w	Host Country	Type	Proposed:p Accepted:a Rejected:r	Anticipated Start Date	Start Date	End Date	Proposed Duration
<b>CRO14010</b>	<b>Mr. FAJ, Dario</b>	<b>2014-12-04</b>	<b>2015-03-26 a</b>	<b>ITA</b>	<b>I</b>	<b>2015-05-27 a</b>	<b>2015-09-14</b>	<b>2015-09-14</b>	<b>2015-09-25</b>	<b>00/14</b>
TC Field:	Radiation Medicine and Health(6A)(CRO14010)									
Training:	Details of the organization of the Medical Physics Department with particular emphasis on IMRT/VMAT treatment planning, dosimetry and quality assurance. The training requested is related to the IAEA's TC project entitled: Developing a Quality Assurance and Quality Control Programme for the Clinical Use of Advanced Radiotherapy Techniques (Oracle Project Number:2061227)(CRO6012).									
Host Institute(s):	Fondazione Poliambulanza Istituto Ospedaliero, Brescia									
<b>CRO14011</b>	<b>Mr. JURKOVIC, Slaven</b>	<b>2014-12-08</b>	<b>2015-03-26 a</b>	<b>ITA</b>	<b>I</b>	<b>2015-05-27 a</b>	<b>2015-09-14</b>	<b>2015-09-14</b>	<b>2015-09-25</b>	<b>00/14</b>
TC Field:	Radiation Medicine and Health(6A)(CRO14011)									
Training:	Details of the organization of the Medical Physics Department with particular emphasis on IMRT/VMAT treatment planning, dosimetry and quality assurance. The training requested is related to the IAEA's TC project entitled: Developing a Quality Assurance and Quality Control Programme for the Clinical Use of Advanced Radiotherapy Techniques (Oracle Project Number:2061227)(CRO6012).									
Host Institute(s):	Fondazione Poliambulanza Istituto Ospedaliero, Brescia									
<b>CRO15003</b>	<b>Ms. IVKOVIC, Ana</b>	<b>2015-06-19</b>	<b>2015-07-01 a</b>	<b>ITA</b>	<b>I</b>	<b>2015-08-06 a</b>	<b>2015-10-12</b>	<b>2015-10-12</b>	<b>2015-10-16</b>	<b>00/7</b>
TC Field:	Radiation Metrology and Dosimetry(6F)(CRO15003)									
Training:	Scientific visit to learn of a mature IMRT program at an advanced radiotherapy facility. In particular, medical physics aspects of IMRT including treatment planning, dosimetry and quality assurance. The training requested is related to the IAEA's TC project entitled: Developing a Quality Assurance and Quality Control Programme for the Clinical Use of Advanced Radiotherapy Techniques (Oracle Project Number:2061227)(CRO6012).									
Host Institute(s):	Istituto Europeo di Oncologia (IEO), Milano									
<b>CRO15006</b>	<b>Ms. SVABIC KOLACIO, Manda</b>	<b>2015-06-25</b>	<b>2015-07-09 a</b>	<b>SWE</b>	<b>I</b>	<b>2015-07-30 a</b>	<b>2015-09-28</b>	<b>2015-09-28</b>	<b>2015-10-02</b>	<b>00/7</b>
TC Field:	Radiation Metrology and Dosimetry(6F)(CRO15006)									
Training:	Scientific visit to learn of a mature IMRT program at an advanced radiotherapy facility. In particular, medical physics aspects of IMRT including treatment planning, dosimetry and quality assurance. The training requested is related to the IAEA's TC project entitled: Developing a Quality Assurance and Quality Control Programme for the Clinical Use of Advanced Radiotherapy Techniques (Oracle Project Number:2061227)(CRO6012).									
Host Institute(s):	Karolinska University Hospital, Stockholm									
<b>CRO15007</b>	<b>Ms. SMILOVIC RADOJCIC, Deni</b>	<b>2015-06-30</b>	<b>2015-10-05 a</b>	<b>SLO</b>	<b>I</b>		<b>2015-12-08 (*)</b>	<b>2015-12-08 (*)</b>		<b>00/7</b>
TC Field:	Radiation Metrology and Dosimetry(6F)(CRO15007)									
Training:	Scientific visit to learn of a mature IMRT program at an advanced radiotherapy facility. In particular, medical physics aspects of IMRT including treatment planning, dosimetry and quality assurance. The training requested is related to the IAEA's TC project entitled: Developing a Quality Assurance and Quality Control Programme for the Clinical Use of									

No	Name	Nominated	Awarded: Non-awarded: Withdrawn:w	Host Country	Type	Proposed: Accepted: Rejected:r	Anticipated Start Date	Start Date	End Date	Proposed Duration
Advanced Radiotherapy Techniques (Oracle Project Number:2061227)(CRO6012).										
Host Institute(s): Institute of Oncology Ljubljana, Ljubljana										

## Training Courses

## Equipment

WP	PO Num	Total Value	Order Date	Status	Vendor Name	Vendor Location
Item	Quantity	Unit	Item Description	Planned Shipping Date	Actual Shipping Date	
201502998 2015/07/20 APPROVED International Electrotechnical Commission (IEC)						
1	1	each	IEC 60731:2011 Book: Medical electrical equipment - Dosimeter with ionization chambers as used in radiotherapy	2015/07/20		
2	1	each	IEC 60601-2-1:2009+AMD1:2014 CSV Book: Medical electric equipment - Part 2-1 Particular reqs for the basic safety and essential performance of electron accelerators	2015/07/20		
201503016 2015/07/20 APPROVED International Electrotechnical Commission (IEC)						
1	1	each	IEC 60731:2011 Book: Medical electrical equipment - Dosimeter with ionization chambers as used in radiotherapy	2015/07/20		
2	1	each	IEC 60601-2-1:2009+AMD1:2014 CSV Book: Medical electric equipment - Part 2-1 Particular reqs for the basic safety and essential performance of electron accelerators	2015/07/20		
201500240 2015/01/23 APPROVED Elekta GmbH						
1	0.421053	each	Upgrade to Radiotherapy Treatment Planning System. As per offer 2014-78462-ML-IAEA. Excluding C#92567 and C#92565 and Pos. 2 Option.	2015/04/25		2015/03/02
1	0.305632	each	Upgrade to Radiotherapy Treatment Planning System. As per offer 2014-78462-ML-IAEA. Excluding C#92567 and C#92565 and Pos. 2 Option.	2015/04/25		2015/03/02
1	0.273316	each	Upgrade to Radiotherapy Treatment Planning System. As per offer 2014-78462-ML-IAEA. Excluding C#92567 and C#92565 and Pos. 2 Option.	2015/04/25		2015/03/02
2	0.3	each	Services: as per offer 2014-78462-ML-IAEA. C#94507 On-Site Installation, Service or Systems Administration and C#92569 4 Days On-Site Customized Support (customer facility).	2015/05/25		
2	0.7	each	Services: as per offer 2014-78462-ML-IAEA. C#94507 On-Site Installation, Service or Systems Administration and C#92569 4 Days On-Site Customized Support (customer facility).	2015/05/25		
3	1	each	Services: Customized training 2 x 5 days of on-site support. As per offer 2014-78462A-ML-IAEA On-Site training	2015/05/30		
201403708 2014/08/07 APPROVED IBA DOSIMETRY GmbH						
1	1	each	Dosimeter Array for static IMRT ETC, CONSISTING:-	2014/10/06		2014/10/01

**Sub-contracts**

WP	PO Num	Unit	Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description				Planned Shipping Date	Actual Shipping Date

**Training Courses**

WP	PO Num	Unit	Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description				Planned Shipping Date	Actual Shipping Date

**Others**

WP	PO Num	Unit	Total Value	Order Date	Status	Vendor Name	Vendor Location	
Item	Quantity	Unit	Item Description				Planned Shipping Date	Actual Shipping Date

1	EMS-48316	2126	each	SupplierNumber:54197 MLINARIC, Ms. Mihaela  Non Staff	2015/02/17	APPROVED	MLINARIC, Ms Mihaela		
1	FTS-53041	2086	each	SupplierNumber:17636 JURKOVIC, Mr. Slaven  Non Staff	2015/08/06	APPROVED	JURKOVIC, Mr Slaven		
1	EMS-48315	1000	each	PartyNumber:614805 Clatterbridge Cancer Centre Non Staff	2015/02/17	APPROVED	Clatterbridge Cancer Centre		
1	FTS-53042	450	each	SupplierNumber:17636 JURKOVIC, Mr. Slaven  Non Staff	2015/08/06	APPROVED	Fondazione Poliambulanza Istituto Ospedaliero		
1	EMS-48317	972.64	each	SupplierNumber:35985 MRCELA, Ms. Iva  Non Staff	2015/02/17	APPROVED	MRCELA, Ms Iva		
1	EMS-48410	1153.36	each	SupplierNumber:35985 MRCELA, Ms. Iva  Non Staff	2015/02/18	APPROVED	MRCELA, Ms Iva		
1	201505148	1	lot	Shipment of books under TC Project Croatia 6012	2015/11/04	APPROVED	DHL Express (Austria) GmbH	2015/11/24	2015/11/05
	FTS-52127				2015/06/25	APPROVED	FAJ, Mr Dario		

1	2086	each	SupplierNumber:31485 FAJ, Mr. Dario  Non Staff
	FTS-53032		2015/08/06 APPROVED Fondazione Poliambulanza Istituto Ospedaliero
1	450	each	SupplierNumber:31485 FAJ, Mr. Dario  Non Staff
	FTS-53649		2015/08/28 APPROVED SVABIC KOLACIO, Ms Manda
1	2207	each	SupplierNumber:86299 SVABIC KOLACIO, Ms. Manda  Non Staff
2	100	each	SupplierNumber:86299 SVABIC KOLACIO, Ms. Manda  Non Staff
	FTS-53650		2015/08/28 APPROVED Karolinska University Hospital
1	1000	each	SupplierNumber:86299 SVABIC KOLACIO, Ms. Manda  Non Staff
	FTS-57172		2015/09/15 APPROVED Abdus Salam International Centre for Theoretical
1	600	each	SupplierNumber:47651 IVKOVIC, Ms. Ana  Non Staff
	FTS-60006		2015/10/23 APPROVED Abdus Salam International Centre for Theoretical
1	600	each	SupplierNumber:17636 JURKOVIC, Mr. Slaven  Non Staff
	A1513727-1525EUR		2015/09/15 APPROVED American Express Services Europe Limited,
1	681.55	each	15ST13727 576135 IVKOVIC, MS ANA Zagreb (CRO) - Milano (ITA) - Zagreb (
	FTS-57171		2015/09/15 APPROVED IVKOVIC, Ms Ana
1	284	each	SupplierNumber:47651 IVKOVIC, Ms. Ana  Non Staff
2	1134	each	SupplierNumber:47651 IVKOVIC, Ms. Ana  Non Staff
3	384	each	SupplierNumber:47651 IVKOVIC, Ms. Ana  Non Staff
	FTS-60005		2015/10/23 APPROVED Fondazione Poliambulanza Istituto Ospedaliero
1	600	each	SupplierNumber:31485 FAJ, Mr. Dario  Non Staff
	A1510959-1525EUR		2015/08/28 APPROVED American Express Services Europe Limited,
1	925.76	each	15ST10959 974225 SVABIC KOLACIO, MS MANDA Rijeka/Zagreb (CRO) - Stockholm (SWE)