

ARPA
Agenzia Regionale per la Prevenzione e l'Ambiente
dell'Emilia - Romagna

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Atti amministrativi

Determinazione dirigenziale	n. DET-2010-743	del 02/11/2010
Oggetto	Servizio Idro-Meteo-Clima. Approvazione dell'accordo di servizio con Carlo Gavazzi Space SpA, per il monitoraggio del rispetto dei limiti annuali per il PM nell'Italia settentrionale, basato su misure da satellite.	
Proposta	n. PDTD-2010-773 del 02/11/2010	
Struttura adottante	Servizio Idro-Meteo-Clima	
Dirigente adottante	Cacciamani Carlo	
Struttura proponente	Area Meteorologia Ambientale Marina e Oceanografica	
Dirigente proponente	Deserti Marco	
Responsabile del procedimento	Deserti Marco	

Questo giorno 02 novembre 2010 presso la sede di Viale Silvani, 6 in Bologna, il Direttore del Servizio Idro-Meteo-Clima, Dott. Carlo Cacciamani, ai sensi del Regolamento Arpa sul Decentramento amministrativo, approvato con D.D.G. n. 65 del 27/09/2010 e dell'art. 4, comma 2 del D.Lgs. 30 marzo 2001, n. 165 determina quanto segue:

Oggetto: Servizio Idro-Meteo-Clima. Approvazione dell'accordo di servizio con Carlo Gavazzi Space SpA, per il monitoraggio del rispetto dei limiti annuali per il PM nell'Italia settentrionale, basato su misure da satellite.

RICHIAMATI:

- la Legge n. 44 del 19 aprile 1995, che istituisce l'Agenzia Regionale per la Prevenzione e l'Ambiente dell'Emilia-Romagna (ARPA), quale ente strumentale della Regione Emilia-Romagna preposto all'esercizio delle funzioni tecniche per la prevenzione collettiva e per i controlli ambientali, nonché all'erogazione di prestazioni analitiche di rilievo sia ambientale che sanitario;
- in particolare l'art. 5 di tale legge, il quale prevede che “Per l’adempimento delle proprie funzioni, attività e compiti, ARPA può definire accordi o convenzioni con Aziende ed Enti pubblici, operanti nei settori suolo, acque, aria, ambiente”, e include tra i compiti di Arpa la realizzazione di iniziative di ricerca applicata sui fenomeni dell'inquinamento;
- il Decreto Legislativo n. 155 del 13/08/2010 "Attuazione della direttiva 2008/50/CE relativa alla qualità dell'aria ambiente e per un'aria più pulita in Europa", che stabilisce i valori limite delle concentrazioni di PM10 e PM2.5 sul territorio e le modalità con cui queste devono essere valutate;

PREMESSO:

- che, nell'ambito del progetto PASODOBLE, finanziato dalla Commissione europea nell’ambito del 7° Programma Quadro per la ricerca e lo sviluppo tecnologico, la ditta Carlo Gavazzi Space SpA si propone di sviluppare il servizio "Monitoraggio del rispetto dei limiti annuali per il PM nell'Italia settentrionale, basato su misure da satellite";
- che le stime dell'inquinamento basate su misure da satellite sono spazialmente omogenee, e possono fornire informazioni complementari alle misure a terra e agli altri strumenti di valutazione già in possesso di ARPA-SIMC;
- che il Servizio Idro-Meteo-Clima di ARPA Emilia-Romagna, di seguito ARPA-SIMC, ha manifestato formalmente il proprio interesse a partecipare allo sviluppo di tale servizio con lettera inviata il 14/11/2008, prot. PGSIM/2008/1692 (agli atti);

CONSIDERATO:

- opportuno e nell'interesse delle parti, regolare i rapporti con la ditta Carlo Gavazzi Space SpA con un apposito accordo, il cui schema si allega sub A) al presente atto quale parte integrante e

sostanziale, per la realizzazione del "Monitoraggio del rispetto dei limiti annuali per il PM nell'Italia settentrionale, basato su misure da satellite" nell'ambito del progetto Pasodoble;

- che, come previsto all'art.12 dell'accordo in parola, lo stesso decorrerà dalla data di sottoscrizione e durerà fino al 30/04/2013 (termine del progetto Pasodoble);

SU PROPOSTA

- del dott. Marco Deserti dell'Area Meteorologia Ambientale Marina e Oceanografica il quale, ai sensi del regolamento sul decentramento amministrativo, approvato con D.D.G. n. 65 del 27.09.2010, ha espresso parere favorevole in merito alla regolarità amministrativa e tecnica del presente atto;

DATO ATTO:

- che il referente scientifico dei ARPA-SIMC relativamente alle attività derivanti dall'accordo è il dottor Enrico Minguzzi;
- che si è provveduto a nominare responsabile del procedimento, ai sensi del combinato disposto di cui agli articoli 4, 5 e 6 della Legge 7 agosto 1990, n 241 e della Legge Regionale n. 32/1993 il dottor Marco Deserti;

DETERMINA

1. di approvare, per i motivi esposti in premessa, la sottoscrizione di un accordo di servizio con Carlo Gavazzi Space SpA, il cui testo si allega sub A) al presente atto quale parte integrante e sostanziale, per il monitoraggio del rispetto dei limiti annuali per il PM nell'Italia settentrionale, basato su misure da satellite;
2. di dare atto che l'accordo decorrerà dalla data di sottoscrizione dell'accordo e durerà fino al 30/04/2013 (termine del progetto Pasodoble);
3. di nominare referente scientifico di ARPA-SIMC relativamente all'accordo il dottor Enrico Minguzzi;
4. di dare atto, inoltre, che l'accordo di cui al punto 1. non prevede oneri a carico di ARPA-SIMC.

Allegati:

A) Schema accordo

IL DIRETTORE DEL
SERVIZIO IDRO-METEO-CLIMA
(F.to Dott. Carlo Cacciamani)

PASODOBLE Service Level Agreement

made between

Carlo Gavazzi Space SpA
Via Gallarate, 150
20151 Milan, Italy

and

ARPA Emilia Romagna
Servizio Idro-Meteo-Clima
Viale Silvani, 6
40122 Bologna, Italy

for the following service:

Satellite-based PM annual compliance monitoring for Northern Italy

in the

**GMES Atmosphere Service pre-operational phase
implemented through the FP 7 Project PASODOBLE**

THE AGREEMENT IS MADE BETWEEN

**Carlo Gavazzi Space SpA
Via Gallarate, 150
20151 Milan, Italy**

the Provider of the PASODOBLE/Myair SERVICE,
hereafter referred to as the SERVICE PROVIDER,

and

**ARPA Emilia Romagna
Servizio Idro-Meteo-Clima
Viale Silvani, 6
40122 Bologna, Italy**

the User of the PASODOBLE/Myair SERVICE,
hereafter referred to as the USER

Carlo Gavazzi Space SpA and ARPA Emilia Romagna, Servizio Idro-Meteo-Clima
shall hereafter be referred as the "Party" or as the "Parties"

PREAMBLE

WHEREAS in the framework of the pre-operational GMES Project PASODOBLE funded by the European Union (or the "EU") under Grant Agreement no. 241557 (or "Grant Agreement") within the Seventh Framework Program (FP7), the Service Provider shall deliver atmospheric Service(s) to specific User organisations.

WHEREAS the User is interested in receiving the Service(s) for the fulfillment of its purposes.

WHEREAS the relationship between the Service Provider and the User shall be governed by this Service Level Agreement (SLA).

WHEREAS both Parties acknowledge that the Service Provider is delivering the Service(s) in compliance with the terms and conditions of the Grant Agreement with the Commission of the European Union (or "the Commission").

IT IS HEREBY AGREED AS FOLLOWS:

ARTICLE 1 – OBJECTIVES OF THE SERVICE LEVEL AGREEMENT

This Service Level Agreement specifies the terms and conditions under which the Service Provider shall deliver the Service(s) to the User and under which the User shall contribute to the definition, evaluation and further improvement of the Service(s).

ARTICLE 2 - GENERAL

- 1) This Service Level Agreement refers only to the Services co-funded by the European Union under Grant Agreement No. 241557. The provision of additional services shall be subject to a separate agreement between the Parties specifying the terms and conditions of such additional services. This Service Level Agreement is not contravening the rules and conditions of the Grant Agreement No. 241557.
- 2) This Service Level Agreement is subject to the approval of the PASODOBLE Coordinator.

ARTICLE 3 – SERVICE(S) PROVIDED

- 1) The Service Provider agrees to deliver to the User the following Service:
Satellite-based PM annual compliance monitoring for Northern Italy (SatPM-CM)
- 2) If applicable the required data volume or flow to be provided for each individual service is specified as a service provision target.
Period 1 (05/2010 – 10/2011):
 - Daily MODIS-based PM10 and PM2.5 concentrations maps over Northern Italy, and
 - Average PM concentrations maps on selected periods to be defined (monthly, seasonal and annual) from 2005 to 2007 years provided by SatPM-CM (at the end of April 2011)

Period 2 (11/2011 – 04/2013):

- As period 1 but for 2008 and 2009 years (provided by SatPM-CM at the end of April 2012)
- 3) The products will be provided in Geotiff and ascii formats, via ftp or http.
- 4) The Service Provider shall provide on-line access to all Service(s) via the PASODOBLE Project Website (<http://www.myair-eu.org>). On this website, additional information for the User shall be made available.
- 5) The service specifications and delivery milestones are detailed in **Annex 1**.

ARTICLE 4 – SERVICE PERIOD

The Service(s) shall be delivered as specified in Article 5 below. The obligation to provide the Service(s) shall be limited to the duration of this Service Level Agreement in accordance with Art. 12 below and to the duration of the co-funding of this Service by the European Commission under Grant Agreement No. 241557 or any successor project.

ARTICLE 5 - SERVICE LEVEL and delivery schedule

- 1) The Service(s) shall be delivered with the following frequency:
one provision for each indicated data volume for the two periods (see art. 3)
- 2) The Service(s) shall be delivered within the following delivery times:
April 2011 (month project M12) for period 1, and April 2012 (month project M24) for period 2.

ARTICLE 6 - QUALITY OF SERVICE(S)

- 1) The Service Provider shall deliver the Service(s) in a quality as defined in the Service Design Document.
- 2) Both Parties shall mutually discuss and agree on any measures to be taken in order to continuously improve the quality of the Service(s) with regard to its fitness for the purposes of the User.

ARTICLE 7 – TERMS AND CONDITIONS OF ACCESS


- 1) The User will be enabled to access data via an authenticated ftp site provided by the Service Provide. The User cannot distribute its account information.


ARTICLE 8 - SERVICE PROVIDER OBLIGATIONS


- 1) The Service Provider hereby grants to the User the non-exclusive right to use free of charge the information products referred to in Article 3 hereof and all related documentation in accordance with the provisions of this Service Level Agreement.


- 2) The Service Provider shall assess and respond to the requirements of the User with regard to its purposes and to any feedback concerning the quality of the Service(s).
- 3) In any case where the User notifies the Service Provider of a deficiency in service delivery the Service Provider shall then take all reasonable measures to rectify the Service(s) and to improve the overall quality of the Service(s) for the User.

ARTICLE 9 - USER OBLIGATIONS

 The User may use the information products for its own purposes and shall have the right to distribute the information products to any relevant End-User Organisation and to the general public in accordance with its mission and competencies. The User agrees not to use the information products for any commercial purposes and shall not make available the information products to any Third Party for any commercial purposes. The commercial use of the information products shall be subject to a written agreement between the Service Provider and the User, where applicable.

 The User agrees to provide towards the end of each period an independent report on the utility and fitness of the Service(s) for its purposes. This report shall take into account all processes of the User in which the information products provided are used. The Report shall be sufficiently comprehensive and detailed to enable the Service Provider to identify the advantages and shortcomings of the information products and to improve them accordingly.

 The User shall notify the Service Provider in any case if the Service(s) are not delivered in the time, frequency, quality or volume specified.

 Any publications by the User regarding the Service(s) and its activities under this SLA shall make adequate reference to the PASODOBLE Project and to the Service Provider, including the fact that PASODOBLE received funding from the European Union's Seventh Framework Programme.

ARTICLE 10 – NO EXCHANGE OF RESOURCES

- 1) All obligations in this Service Level Agreement are fulfilled at no exchange of resources.

ARTICLE 11 - WARRANTY AND LIABILITY

- 1) The Service Provider will deliver the Service(s) with the best available science and technology and will use its reasonable efforts that the Service(s) comply with all requirements regarding the time, frequency, quality and volume of the Service(s). In case the required input data (satellite and/or in-situ) are not available, not available in time or in sufficient quality, the Service Provider will use its best efforts to find appropriate replacement data. The Service Provider will use its best efforts, but can not undertake any guarantee that the Service(s) are fit for the purposes of the User. Both Parties shall continuously discuss and take measures to improve the overall quality of the Service(s).
- 2) The liability of the Service Provider for all cases of damage of the User which are

caused by gross negligence of the Service Provider shall, where not covered by existing insurances, be limited to a maximum aggregate amount of 10.000 EURO. Any further liability is expressly excluded. Mandatory statutory liabilities shall not be affected hereby.

- 3) Under no circumstances shall the Service Provider be liable for incidental, indirect, special or consequential damage including, but not limited to loss of profit, loss of use, loss of revenues or damages to business or reputation arising from the performance or non-performance of any aspect of the present SLA or from the use of the Service(s) by the User.

ARTICLE 12 – DURATION AND AMENDMENTS

- 1) This Service Level Agreement shall have an initial duration until the end of the PASODOBLE project which is expected to be on 30.04.2013.
- 2) The specific requirements of the User Organisation may evolve with respect to the detailed specifications and service provision targets specified herein. Such evolution will be taken into account during the execution of this Service Level Agreement. The Service Level Agreement shall be subsequently amended for each subsequent period of the PASODOBLE contract in line with the changing conditions under which the Service(s) are supplied and used. Such technical amendments shall be negotiated and approved by the contact persons of each party named in article 14.
- 3) The validity period of this Service Level Agreement may be extended by mutual written agreement of all parties if the Service(s) are continued beyond 30. 04. 2013.

ARTICLE 13 - TERMINATION

- 1) Each Party shall have the right to terminate this Service Level Agreement with good reason. Good reason shall exist in case the cancelling Party can not be reasonably expected to comply with its contractual obligations until the end of this Agreement.
- 2) The Service Provider shall have the right to terminate this Service Level Agreement in case that the Grant Agreement with the Commission is terminated or amended in a way which prevents the further delivery of the Service(s).
- 3) Any termination shall be valid only if made in writing and shall become effective within one month after notification to the other Party.

ARTICLE 14 - NOTICES

- (1) The contact persons of each Party are:

USER:

Enrico Minguzzi
Phone: +39 051 525918
Fax: +39 051 525936
e-mail: eminguzzi@arpa.emr.it

SERVICE PROVIDER:

Walter Di Nicolantonio
Phone: +39 051 6398097
Fax: +39 051 6398143
e-mail: w.dinicolantonio@isac.cnr.it

- (2) Each Party shall inform the other Party immediately in writing about changes regarding their respective contact persons.

ARTICLE 15 - MISCELLANEOUS

- 1) This Service Level Agreement shall be binding for both Parties and shall constitute the entire agreement between the Service Provider and the User with respect to the subject matter of this Service Level Agreement. Both Parties however acknowledge that the Service Provider is obliged to comply with the provisions of the Grant Agreement with the Commission.
- 2) This Agreement shall come into effect upon its signature by both Parties.
- 3) This Agreement shall be subject to the laws of Germany. Place of Jurisdiction for all disputes arising under this Agreement shall be Cologne, Germany.

SERVICE PROVIDER

USER

Lucia Tampellini
Head of Earth Observation Dept.

Carlo Cacciamani
Head of Hydro-Meteo-Climate Service

Carlo Gavazzi Space SPA
Via Gallarate, 150
20151 Milano - Italy

ARPA Emilia Romagna,
Servizio Idro-Meteo-Clima
Viale Silvani, 6
40122 Bologna - Italy

On this date _____

On this date _____

Annex 1:

Service: Satellite-based PM annual compliance monitoring for Northern Italy (SatPM-CM)

Purpose of the User which are supported by the Service:

User purpose	Support by PASODOBLE service
Management of air quality for area of competence within ARPA institutional duties and in the frame of European air quality directives	Provide daily estimates of PM concentrations over the domain of interest as derived using satellite observations.

Service specifications:

Criterion	Performance level to be achieved
Information content	Estimate of PM _{2.5} and PM ₁₀ concentrations at the ground level derived from both MODIS/Terra and MODIS/Aqua observations. Maps of averaged PM concentrations (monthly, seasonal and annual) and/or relative percentile maps of exceedances over critical thresholds
Service level	record length
Delivery formats	GeoTIFF and ASCII
auxiliary variables	Mixing layer height and relative humidity at the ground as simulated by MM5 in the downstream processing, starting with boundary and initial conditions provided by ECMWF analysis from MACC core service.
Geographic coverage, sampling and horizontal resolution	Maps over Northern Italy at 10 x 10 km ² spatial resolution
Vertical coverage, sampling and resolution	NA
Time coverage, sampling and resolution	daily maps, twice per day, for whole 2005, 2006, 2007, 2008 and 2009
Additional information	Products will be upgraded - during the service period - following the likely improvements in the satellite-based PM algorithm and/or in the retrieval of Aerosol Optical parameters from MODIS observations. Upgraded data will be provided to the User – after the delivery milestone of each period - when available. Comparison with user's CTM outputs on the averaged (annual mean) maps and/or relative percentile of exceedances maps is foreseen.
Known issues	Since daily winter maps can experience a lack of data mainly due to clouds' presence, a multiannual record is provided to the User to increase the number of available observations.

Delivery milestones:

milestone	date	Content
period 1	04/2011	Maps of daily concentrations estimates / Annual mean concentrations / relative percentile of exceedances over critical threshold for PM from 2005 to 2007
period 2	04/2012	Maps of daily concentrations estimates / Annual mean concentrations / relative percentile of exceedances over critical threshold for PM from 2008 to 2009