Contract

between

COSMO Contract Partner

(hereinafter referred to as „The COSMO-Partner“)

and

The Research Institute

(Address)

(hereinafter referred to as „the Research Institute“)

concerning

Licensing / Delivery of Software for scientific purposes

# Preamble

1 The COSMO-Partner is a Partner of the Consortium for Small Scale Modelling (COSMO Consortium), which consists of National Meteorological or Hydrometeorological Services (hereinafter the “COSMO-Partners”). The COSMO Consortium consists at the time of the conclusion of this contract of the National Meteorological Services of Germany (DWD), Greece (HNMS), Israel (IMS), Italy (ReMet), Poland (IMGW-PIB), Romania (NMA), Russia (Roshydromet) and Switzerland (MeteoSwiss). Under certain circumstances, other National Meteorological or Hydrometeorological Services might be admitted as additional Partners in the COSMO Consortium in the future.

2 The COSMO Consortium has developed a generic tool “fieldextra” to manipulate Numerical Weather Prediction data and gridded observations, which is the official postprocessing tool of the COSMO Consortium. Simple data processing and more complex data operations are supported, for example: selecting data satisfying some complex condition, comparing or merging multiple fields, horizontal and vertical re-gridding, computation of regional means, computation of stability indices, computation of neighbourhood and EPS probabilities. A rich set of output format is proposed, including GRIB1 and GRIB2 and NetCDF. Fieldextra also contains the libgrib originally developed by the Deutscher Wetterdienst and the ICON tools developed by the Deutscher Wetterdienst.

# Object of the contract

3 Subject to the provisions of this contract the COSMO-Partner grants to the Research Institute the right to use the following copyright-protected software referred to hereinafter as the “COSMO-Software”:

Name: fieldextra

Version: 14.0.0 (17.02.2022)

Short description: Postprocessing program to process and combine model fields in various and flexible ways, deriving products in various NON graphic formats like GRIB1, GRIB2, NetCDF or ASCII.

Documentation: The COSMO-Software is delivered in source code on suitable data media selected by the COSMO-Partner.

# Licensing conditions

4 In accordance with n. 3 above, the COSMO-Software are licensed for local use by the Research Institute solely and exclusively for scientific purposes including research funded by third parties, under the condition that the results are made public..

5 The Research Institute has a non-exclusive right of use which means that the COSMO-Partner may grant licenses also to other users.

6 Notice of copyright, serial numbers or any other means used for the identification of the COSMO-Software may not under any circumstances be removed or altered.

7 The licensing or any other transfer of the COSMO-Software to a third party is not permitted, unless authorized by the COSMO-Partner respectively the Partners in the COSMO Consortium in writing. Every and any use of the COSMO-Software beyond the above stipulated rights of use by the Research Institute is not permissible and is regarded as a breach of this contract.

8 Products obtained from the use of the COSMO-Software may be used only and exclusively for scientific and teaching purposes.

9 Any transfer and/or commercial exploitation of the products going beyond this is not permitted.

10 The Research Institute is itself responsible for the installation of the COSMO-Software.

11 The Research Institute is obliged to release to the COSMO-Partner as well as to the other COSMO-Partners in an appropriate form the outcomes and products of any work for which the supplied COSMO-Software was used and, if applicable, to discuss with the COSMO-Partner on the occasion of work-related meetings any developments to the COSMO-Software produced by the Research Institute and to release to the COSMO-Partner the outcomes resp. the further-developed COSMO-Software in a suitable form.

# Intellectual property rights of the COSMO-Software

12 The intellectual property rights of the COSMO-Software belong to the COSMO-Partner, other COSMO-Partner and other third parties (the "IP-Rights Beneficiaries"). The Research Institute acknowledges and agrees that all intellectual property rights of the COSMO-Software shall fully remain with the IP-Rights Beneficiaries.

13 The COSMO-Software is protected by the laws covering intellectual property rights, by international contracts and other national legal regulations prohibiting unauthorized copying.

14 The rights to all intangibles and other uses of the Services provided are retained by the COSMO-Partner.

# Intellectual property rights to the outcomes and further development of the COSMO-Software

15 The intellectual property rights to the outcomes (i.e. all knowledge that could be derived from the usage of the COSMO-Software, in particular through the scientific analysis of the products generated) and the further development of the COSMO-Software belong to the contributing party of this contract. The COSMO-Partner has the non-exclusive, free of charge and unlimited in time right to use and to share with the other COSMO-Partners the outcomes and further developments of the COSMO-Software. The COSMO-Partner undertakes to make the source code of the further-developed COSMO-Software available to the COSMO Consortium for use and integration into an official version, which will be distributed to research institutes and universities for research purposes and to Governmental Hydrometeorological or Meteorological Services for research purpose and official duty.

16 The Research Institute has the right to use all outcomes and further developments of the COSMO-Software free of charge for research and teaching purposes, also within the framework of research collaboration of the Research Institute with third parties, in all fields of application.

# Obligation of protection

17 The Research Institute ensures that no other uses of the COSMO-Software takes place other than those contractually stipulated.

18 The Research Institute organizes the appropriate instruction of staff, puts in place security measures customary to a research institution but with no less care than used in its own affairs and carries out regular inspections to rule out any application which contravenes the terms of the contract.

19 Should any application of the COSMO-Software occur which is in contravention of the contract, the COSMO-Partner reserves the right to withdraw completely from the contract without any further notice and at any time.

# Charges and payment modalities

20 The licensing of the COSMO Software is free of charge.

21 Should the COSMO-Partner decide not to withdraw from the contract in the event of a breach of the obligation of protection by the Research Institute, the COSMO-Partner is entitled to ask for a licensing fee from the date of a written warning to the Research Institute for further use of the licensed COSMO-Software in contravention of the contract. The licensing fee would amount to those ordinarily due for licensing fees for the released COSMO-Software.

# Warranty, liability, software support and further development

22 The COSMO-Partner excludes any Warranty for the COSMO-Software.

23 The COSMO-Partner is only liable for damage caused to the Research Institute by gross negligence or intent. Any further liability is excluded, especially for any indirect damage.

24 The COSMO-Partner does not provide any support for the COSMO-Software.

25 Any new reference versions resulting from the further development of the COSMO-Software by the COSMO-Partners may be made available to the Research Institute upon request.

26 The Research Institute is obliged to inform the COSMO-Partner about any errors detected in the released COSMO-Software and/or about any further developments which have been carried out and to make the latter available free of charge and unlimited in time to the COSMO-Partner for its unrestricted use and transfer.

27 The provisions of Section 8 Subsection 23 (Warranty) and 24 (Liability) apply vice versa in favor of the Research Institute concerning the further developed and licensed outcomes to the COSMO-Software according to Section 3 n. 11 and Section 5 n. 15.

# Duration/right of termination/contract termination

28 This contract is valid for a period of three years. It comes into effect on the first day of the month following the last signature to the contract.

29 It will be extended tacitly, automatically and repeatedly for a further year should neither of the contract Parties duly give 3 months’ in advance a written notice of termination of the contract to the end of a contract year.

30 The right to termination due to a contravention of the contract is thereby not affected.

31 Upon termination of the contract all versions of the COSMO-Software in the possession of the Research Institute, including the source code and all documentation it might have, are to be destroyed within 30 days. The COSMO-Partner is to be notified of the destruction.

# Ancillary agreements/changes to the contract

32 Ancillary and all agreements which contain a change, addition or particularization of the contract have to be in written form.

# Severability clause

33 Should any of the provisions of this contract be invalid or not enforceable, the validity of the remaining contents of the contract remains thereby unaffected.

34 In such case, the Parties shall reach an agreement on the necessity of filling the regulatory gap arising there from. Any replacement provision shall have to comply with the purpose, the intended balance and the spirit of the contract.

# Transfer and assignment

35 Neither this contract nor any individual rights and obligations under this contract may be transferred or assigned to any third party who is not a signatory of the contract.

# Scope of the contract

36 This contract contains the contractual conditions in their entirety. It replaces completely any pre-contractual, verbal or written agreements.

# Dispute settlement, applicable law and jurisdiction

37 The Contracting Parties shall settle any dispute under this Contract in advance by negotiation. Legal proceedings shall only be taken into consideration in the case that negotiations fail.

38 The applicable law shall be that of Switzerland.

39 For all controversies out of the present Contract the place of jurisdiction shall be Zurich.

# Copies and signatures

40 This contract is issued in two identically-worded originals. All parties to the contract each receives an original.

**The COSMO-Partner**

Place, date:, ……………………………………..

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Name, function |  | Name, function |

**The Research Institute**

Place, date: ………………………………………

|  |  |  |
| --- | --- | --- |
|  |  |  |
| Name, function |  | Name, function |

**APPENDIX 1**

to the Contract between

**MeteoSwiss** and **GHMS** of < Datum >

**Supported platforms**

Any UNIX / Linux based system

**Technical prerequisites**

Fortran compiler supporting Fortran 2008 standard and OpenMP

(gfortran, based on gcc 5.4.0 or better advised)

The following external static libraries are required:

(1) the libaec library to support adaptive entropy coding compression with the GRIB API  (version 1.0 or better)

(2) the jasper library to support jpeg compression with the GRIB API  (version 1.900.1 or better)

(3) the ECMWF GRIB API  to support GRIB 2 decoding and encoding (version 1.20.0 or better)

(4) the z library (version 1.2.7 or better)

(5) the HDF 5 library (version 1.8.15 or better)

(6) the UCAR NetCDF library to support decoding and encoding of NetCDF files (version 4.2 or better)

(7) the NWP SAF RTTOV library to  simulate satellite radiances (version 11.2.0 or better)