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Darmstadt, 29th March 2022

Subject: INPE-ESA network and operations cross-support: joint technical definition phase

Dear Dr. De Nardin,

Purpose of this letter is to express INPE and ESA common intent to pursue a joint definition and initial testing activity in the domain of network and operations cross-support.

Our Organisations share certain mutual interest and priorities in the area of space to ground communication and mission operations. In this respect, over the past months, our respective teams had the opportunity to engage into technical discussions addressing the possible establishment of a future framework for the provision of network and operations cross support.

In particular, INPE and ESA teams have identified the intention to discuss:

- cross-support on telemetry data acquisition, tracking, and command;
- flight dynamics and space debris collision prediction;
- mission operations concepts and experience.

In order to consolidate the technical elements of such possible collaboration, it is proposed to perform a joint technical definition phase including testing of the associated interfaces. The main objective of this initiative will be to agree the detailed scope of the various areas of cooperation, define the interfaces and procedures between the relevant facilities and teams, and perform a first testing campaign of the resulting data exchanges, in order to establish a future agreement.

The technical details and implementation will be iterated by our respective teams, combining efforts to complement their experiences in the areas of common interest, without prejudice to their individual and independent actions.



This joint initiative will have an initial duration of 12 months, and it may be further extended or terminated in advance, through written notice or by mutual agreement. It will be supported by each Organisation on a best effort basis, each covering the effort of their respective activities.

If the above proposal is acceptable to INPE, I propose that this letter, together with your written affirmative reply, constitute the basis for our respective teams to proceed with its execution.

I trust that this joint initiative will be mutually beneficial and will contribute to build up and strengthen cooperative relationship between our organizations.

Yours sincerely,

Simon Plum
Head, Mission Operations Department
European Space Operations Centre, European Space Agency

cc: P. Bargellini, L. Santana, G. Billig, I. Munoz, A. Fonseca



INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS
Direção

OFÍCIO Nº 604/2022/INPE

São José dos Campos, 12 de abril de 2022.

To
Mr. Simon Plum
Head, Mission Operations Department
European Space Operations Centre
European Space Agency
Germany

Assunto: INPE-ESA network and operations cross-support: joint technical definition phase.

Dear Mr. Simon Pulm,

Thanks for sending the letter regarding the INPE-ESA network and operations cross-support. From INPE's institutional standpoint, it is relevant to proceed, together with ESA, with the Joint Technical Definition Phase aiming to discuss future collaboration in the areas where we share a mutual interest. Such as:

- cross-support on telemetry data acquisition, tracking, and command;
- flight dynamics and space debris collision prediction,
- mission operations concepts and experience.

I agree that this joint initiative will strengthen the cooperative relationship between our organizations.

Yours sincerely,

Clezio Marcos De Nardin
Director INPE



Documento assinado eletronicamente por **Clezio Marcos De Nardin, Diretor do Instituto Nacional de Pesquisas Espaciais**, em 12/04/2022, às 11:57 (horário oficial de Brasília), com fundamento no § 3º do art. 4º do [Decreto nº 10.543, de 13 de novembro de 2020](#).



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Anexos:

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Em caso de resposta a este Ofício, fazer referência expressa a: Ofício nº 604/2022/INPE - Processo nº 01340.002493/2022-48 - Nº SEI: 9673486