

# **Innovation Partnerships and Italy's Participation in the European Space Economy Plan**

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### **Abstract**

The present study intends to analyse the development process of the Space Economy, firstly at EU level, so as to subsequently examine the characteristics, especially the legal ones, that characterise the Italian Plan for the Space Economy, for the implementation of which the Innovation Partnership was used, in particular for the enactment of the Mirror GovSatCom Programme.

### **I. Introduction: The Central Role of the Innovation Partnerships for the Italian Space Economy**

A study of the evolution of the European Union shows that throughout its short history, economic aspects have regularly played a key role in the process of internal integration, supported by the promotion and testing of innovative ways of solving problems common to the Member States.

With this perspective, numerous projects of general interest have been launched at EU level in strategic sectors, aimed at boosting the competitiveness of the economic system as a whole, among which the experiences of international cooperation in the aerospace sector, including the space economy, are particularly important.

The Space Economy is to be interpreted as the production process which, from the outset, begins with research, development and implementation of space infrastructures, ie the 'upstream' sector, where the associated innovative products and services can be realised, ie the respective 'downstream' sector, which may include, for example, services for environmental monitoring and weather forecasting.

For the development of the Italian Space Economy, the innovation partnership procedure has played a key role.

The innovation partnership is an entirely new procedure compared to the range of procedures provided for by the previous rules, which allows the public authority to develop innovative products, services or works in collaboration with a private economic operator, and then to purchase the result, without the

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need to give rise to a new procedure.

This is a scheme of EU origin, provided for by Art 31 of Directive 2014/24/EU and Art 49 of Directive 2014/25/EU, transposed in Italy by Art 65 of decreto legislativo 18 April 2016 no 50.

However, as early as 2010, the European Commission described a new model of intervention in the areas of research and innovation in the Communication 'Europe 2020 Flagship Initiative: Innovation Union', promoting interventions based on partnerships of national and European regional players involved in the entire chain of research and development activities, through cooperation between public and private operators in order to

support innovation in areas that represent challenges for European society, such as climate change, energy efficiency, food security, health and an ageing population.

These policies are the result of economic studies carried out in the United Kingdom since the 1970s, which gave impetus to a real innovation policy based on a different and revolutionary way of understanding public demand: the so-called PPI, Public Procurement for Innovation.<sup>1</sup>

The above-mentioned Anglo-Saxon economic studies have shown that it is not essential to intervene with public subsidies to stimulate innovation policies, but it is much more effective to stimulate the interaction between supply and demand through public procurement, which is the main instrument of innovation policy.<sup>2</sup>

Public authorities are able to take more risks related to the use of non-established technologies, high upfront and transition costs or market fluctuations. This applies to PPI aimed at implementing the services provided by the contracting authority as well as to innovation to satisfy collective interests, such as energy saving or environmental protection.<sup>3</sup>

The European Union could therefore be considered as the soil in which these studies and theories have been able to be developed in practice, through the implementation of wide-ranging interventions on issues of Community importance.

In particular, the promotion of the 'Common Agricultural Policy' reform strategy of 2012 has led to the launch of the 'Agricultural Productivity and Sustainability' European Innovation Partnership, which aims to promote competitive and sustainable agricultural systems capable of providing effective solutions to the problems identified as a result of the analyses carried out on the real needs of farmers and the level of innovation in the field.

<sup>1</sup> J. Edler and L. Georghiou, 'Public procurement and innovation – Resurrecting the demand side' *Research Policy*, 7 (2007).

<sup>2</sup> E. von Hippel, 'The dominant role of users in the scientific instrument innovation process' *Research Policy*, 3 (1976).

<sup>3</sup> C. Edquist and J.M. Zabala-Iturriagoitia, 'Public Procurement for Innovation as mission-oriented innovation policy' *Research Policy*, 10 (2012); B. Aschoff and W. Sofka, 'Innovation on demand. Can public procurement drive market success of innovations?' *Research Policy*, 8 (2009).

In the last analysis, the European Innovation Partnership can be considered as the precursor of the partnership envisaged by the 2014 European Directive, although it is an instrument for implementing general policies through the funding of projects on broad and strategic sectors, where research and innovation are key to economic and social development, whereas the more recent Innovation Partnership for procurement has the same ambition of fostering research and innovation, but on a smaller scale, as it is applied on a contract-by-contract basis, through an award procedure that fosters innovation not through policies with a general impact, but through bespoke interventions.<sup>4</sup>

## II. EU Aerospace Policies and the GovSatCom Programme

Historically, as mentioned above, economic aspects have always played a crucial role in the process of European integration, fostering the experimentation of innovative ways of solving problems common to the member states, and in this sense the establishment of the common market and the introduction of the single currency have been the most important illustration of this journey.

With the adoption of the TFEU, the debate at European level focused on European economic governance, in order to identify suitable ways to ensure a revival of the competitiveness of the European economy at international level, even though an attempt had already been made in March 2000 with the definition of the Lisbon Strategy to outline the most suitable policy to make the European Union the most competitive economy in the world, although it was soon realised that the objectives set were particularly difficult to achieve, and this encouraged the study of new and different solutions to revitalise the European economic system.

In the current globalised economic environment, measures to guide economic development need to be coordinated at EU level, avoiding the adoption of different and disharmonious policies by individual Member States.

Indeed, the aerospace sector is one of the privileged sectors in which public institutions have historically played an active role in supporting and directing the development of the sector, probably due to its link with national industry and national defence policy.

However, even the operations carried out in the first half of the 20<sup>th</sup> century by each country individually have important common features, and this has led to the emergence of single European strategies for carrying out ambitious and innovative projects since the 1960s.

Nevertheless, it is not easy to identify suitable instruments for international cooperation in the aerospace sector without a real European government,

<sup>4</sup> F. Gambardella, *Le regole del dialogo e la nuova disciplina dell'evidenza pubblica* (Torino: Giappichelli, 2016), 145-146.

although projects such as Concorde and Airbus, in civil aeronautics, or Galileo, in satellite positioning, have recently been implemented.<sup>5</sup>

The Airbus project, the result of a Franco-German initiative in 1967, was intended to support the development of the civil aeronautics sector in Europe in order to drive European economic modernisation in other sectors as well.<sup>6</sup>

The aeronautics industry had already become a sector of public interest at the beginning of the 20<sup>th</sup> century. This was due, firstly, to its importance for military purposes and, secondly, to its characteristic of being a 'research and innovation' intensive industry, which enabled its development for civil purposes.<sup>7</sup>

In the past, the civil aircraft market was mainly controlled by US companies such as Boeing, which meant that Airbus was at a particular disadvantage from the outset. It must be considered that, while Boeing was addressing a particularly large and imposing market such as the United States, Airbus could not rely on a single European market, which at that time was fragmented into several national markets, which were also regulated differently in political terms. The division into numerous small national markets in Europe did not allow the creation of a single internal market capable of absorbing production on economically advantageous terms, to the benefit of the US industry.<sup>8</sup>

Indeed, at the end of the 1960s, European aircraft manufacturers were on the fringes of the international market and essentially played the role of subcontractors for US industry.<sup>9</sup>

Moreover, Boeing had a certain synergy between civil and military production, whereas Airbus concentrated only on civil aeronautics, bearing in mind also that Boeing received federal public aid for research, whereas Airbus could not count on a European research policy but only on national aid.

And still, in spite of the many obstacles, both political and economic, Airbus succeeded in taking Boeing's world market leadership in 2004, the result of a series of courageous long-term choices, starting with the choice of legal status for the initiative, that of a *Groupement d'intérêt économique* (GIE), without

<sup>5</sup> P. Miller, 'Aerospace Companies and the State in Europe', in J. Hayward ed, *Industrial Enterprise and European Integration. From National to International Champions in Western Europe* (Oxford: Oxford University Press, 1995); K. Hayward, *European collaboration in civil aerospace* (London: Pinter, 1986).

<sup>6</sup> P. Drucker, *Economia, politica e management: nuove tendenze nello sviluppo economico, imprenditoriale e sociale* (Milano: Liguori, 1989); See also R. Koselleck, *Futuro passato: per una semantica dei tempi storici* (Genova: CLUEB, 1986); F. Mosconi, 'La politica industriale europea e la competitività italiana nei settori high-tech', in P. Guerrieri et al eds, *Tornare a crescere* (Roma: Arel, 2005).

<sup>7</sup> D. Velo, 'L'impresa europea di interesse generale', in G. Rossi ed, *L'Impresa europea di interesse generale* (Milano: Giuffrè, 2006).

<sup>8</sup> K. Hayward, *Industrial Enterprise and European Integration, from National to International Champions in Western Europe* (Oxford: Oxford University Press, 1995).

<sup>9</sup> A. Bonaccorsi, *Cambiamento tecnologico e competizione nell'industria aeronautica civile* (Milano: Guerini e associati, 1996); G. Raffaello, 'La grande impresa federale europea: il caso Airbus', in D. Velo ed, *L'Europa dei progetti* (Milano: Giuffrè, 2007).

share capital and with the economic responsibility of the founding members. This structure retained an important public character of a confederal nature, suited more to protecting the interests of the participants than to supporting the entrepreneurial project; this meant that the enterprise represented only an instrument subordinate to the interests of the participants, which presented itself in a unitary manner solely for marketing purposes.<sup>10</sup>

In a very concise way, it can be said that this operation represents the success of a political vision aimed at collaboration to support long-term political choices. Airbus certainly represents an important precedent, considering, moreover, that its success took place before the creation of the European Union.

The Galileo project, on the other hand, started in 1999 on the joint initiative of the European Union, the Commission and the European Space Agency (ESA) and represents the first example of collaboration between the Community institutions and the ESA, with the aim of building an autonomous satellite radio navigation system.<sup>11</sup>

Indeed, one could consider the Galileo project as the main reference point for the development of a European Union space policy, which was inaugurated at the time for three different reasons.<sup>12</sup>

Firstly, the European Union and the ESA wanted to develop information technology on the basis of the American experience; indeed, the greatest innovations in this field are obtained as a result of research in the space sector.

US companies operating in technology-intensive sectors still benefit from an advantageous position due to the US leadership in space exploration programmes. For this reason, it is worth mentioning the example of the first model of electronic calculator built in 1946 for the US Army and characterised by its considerable size and weight of thirty tonnes. Later, the need to use this instrument in the space sector meant that its weight and size had to be reduced, which favoured the development of microelectronics and more commercial applications such as personal computers.

Taking into consideration the US experience, the intention was therefore to provide Europe with the most advanced technological infrastructure in the satellite

<sup>10</sup> D. Hickie, 'Airbus Industrie: A Case Study in European High-Technology Cooperation', in U. Hilpert ed, *State Policies and Techno-Industrial Innovation* (London: Routledge, 1991); P. Drucker, *Innovation and Entrepreneurship* (New York: Harper&Row, 1985); S. Mcguire, *Airbus Industrie. Conflict and Cooperation in US-EC Trade Relations* (Oxford: St. Antony Series, 1997).

<sup>11</sup> F. Von der Dunk, 'Towards one Captain on the European Spaceship – Why the EU should Join ESA' *Space Policy*, XIX, 83-86 (2003); W. von Kries, 'Which Future for European Space Agencies?' *Space Policy*, XIX, 157-161 (2003).

<sup>12</sup> L. Bottinelli, 'L'impresa europea di interesse generale: il progetto Galileo', in G. Rossi ed, *L'Impresa europea di interesse generale* (Milano: Giuffrè, 2006), 148; G. Venturini, 'La sfida di Galileo, paper for the Conference 'Il futuro dell'Europa nelle tecnologie' ' Venice, 7 May 2004; European Space Agency, *Galileo – The European Programme for Global Navigation Services*, available at [www.esa.int](http://www.esa.int).

navigation sector, with positive spin-offs in other areas as well.<sup>13</sup>

The second reason is instrumental, since the policies pursued at the end of the 1990s by the European Union concern the sectors in which the implementation of the Galileo project could bring the greatest benefits, such as agriculture, the environment, transport and scientific research.

Finally, political considerations must be underlined, since the programme is intended as an alternative to the civil satellite radio navigation services provided by the American Global Position System (GPS). The creation of an autonomous satellite system underlines Europe's desire to become independent of US services. The creation of Galileo will therefore enable Europe to equip itself with an autonomous system consisting of thirty satellites in orbit and the ground facilities that will receive their signals.<sup>14</sup> Among the most recent programmes, the Governmental Satellite Communications ought to be highlighted, referred to as the GovSatCom programme. This programme was launched in 2013 by the European Council to prepare for the next generation of governmental satellite communications in 2025, through close cooperation between Member States, the European Commission, the European Space Agency (ESA) and the support of the European Defence Agency (EDA).

In particular, the goal of the GovSatCom programme is to ensure reliable, secure and cost-effective civil and military satellite communication services for EU and Member State public authorities managing critical security missions and operations.

In pursuing this goal, the GovSatCom programme also aims to strengthen European autonomy and overcome fragmentation of demand through the use of accessible and innovative solutions in synergy with industrial actors.

Indeed, it is very timely to note that satellite communications have become critical and essential elements for defence, security, humanitarian aid, emergency responses or diplomatic communications, given their crucial role in military missions and civil operations, especially those taking place in remote locations with little, if any, infrastructure available.

Decision-making processes cannot now ignore highly sensitive and timely information, which is why the importance of having secure connection and communication systems available cannot be underestimated.

Satellite communications in the GovSatCom category, in particular, provide secure access with high standards of protection, without, however, matching the levels of MILSATCOM communications, which are generally provided by sovereign military systems. The COMSATCOM category, which includes satellite communications purchased on the commercial market on the basis of need and availability, is even different.

However, the EDA's priorities for satellite communications are directed in

<sup>13</sup> W. Hutton, *Europa VS USA* (Roma: Fazi, 2003).

<sup>14</sup> L. Bottinelli, n 12 above, 149.

particular at the GOVSATCOM (as well as EUSATCOM Market) initiatives, which have developed following a sequential procedure.

From the outset, EDA priorities for satellite communications were identified by the Member States' Ministries of Defence as early as 2011, while the GovSatCom Programme was endorsed by the EDA Governing Council on 19 November 2013, thus providing for the establishment of a dedicated Government Satellite Communications Group (GOVSATCOM) composed of Germany, Spain, France, the United Kingdom and Italy in order to assess how their respective current and planned national capabilities could address future needs.<sup>15</sup>

The European Council's approval, on the other hand, dates back to 19 December 2013, and emphasises once again that the next generation of government satellite communications must be achieved through close cooperation between the member states, the European Commission and the European Space Agency.

Finally, in November 2014, the EDA Steering Committee approved the initial satellite communication requirements for European military actors involved in the conduct of national operations and Common Security and Defence Policy (CSDP), included in the Common Staff Target document. Subsequently, with the support of a feasibility study, the EDA developed the technical and mission requirements and evaluated various solutions to meet these needs.

The 'Common Staff Requirements' document and associated Business Case, which details the GOVSATCOM requirements and proposes the way forward to meet these requirements, were finally approved by the EDA Steering Committee in March 2017.

Following this approval, the EDA, together with contributing Member States, developed the EDA GOVSATCOM Pooling and Sharing demonstration project (GSC Demo) from June 2017. In January 2019, the GSC Demo entered the execution phase with the first meeting of the project organization management group.

This means that the project is now ready to provide GOVSATCOM services to meet the specific requirements of Member States and European CSDP actors through the pooled capabilities of contributing Member States.

This governmental pooled capability was created to provide satellite communication resources that cannot be obtained on the commercial market with a sufficient level of guaranteed access and security. The GSC demo responds to an existing need and is fully in line with the revised 2018 Capability Development Plan and the resulting EU capability development priorities.

The project should also be seen in the light of ongoing EU efforts to establish

<sup>15</sup> Conclusions of the European Council of 19-20 December 2013 on the Common Security and Defence Policy Communications of the Minister of Defence – 23 January 2014, Camera dei Deputati, Ufficio Rapporti con l'Unione europea, XVII legislatura, 15 /2014 – 22 January 2014, available at <https://tinyurl.com/s9kv7r46> (last visited 30 June 2021).

a European GOVSATCOM in the framework of the next space programme and in the context of the European Space Agency's activities in the field of satellite communications security.

Furthermore, the GSC Demo project complements the EDA's EU Satcom Market project, which has been running since 2012, which provides commercially available SATCOM and CIS services in an efficient and effective way.

The GOVSATCOM initiative marks a new partnership, not only between military and civilian institutional actors, but also with industry, in order to better contribute to Europe's competitiveness.

Indeed, according to the European Council, satellite communications (SatCom) are critical elements for defence, security, humanitarian aid, emergency response or diplomatic communications. They are a key element for civilian missions and military operations, in particular in remote and austere environments with little or no infrastructure, which is why they have been defined as one of the four capability development programmes, together with Air-to-Air Refuelling, Remote Piloting of Air Transport Systems and Cyber Defence.

Considering these premises, it is easy to see that the sector has plenty of room for research and experimentation, where the innovation partnership has finally found fertile ground for its application.

At the national level, in fact, the contribution to the European GovSatCom initiative is represented by the Mirror GovSatCom Programme, designed to give Italy an important position in a strategic sector such as institutional telecommunications. In particular, the national objective is to build and activate Ital-GovSatCom, an innovative and competitive satellite system for the provision of telecommunications services with security, resilience and reliability features that allow it to be used for institutional purposes in various fields of application, such as civil protection, security, defence, humanitarian aid, telemedicine and maritime surveillance.

### **III. The Innovation Partnership Applied Within the Italian Space Economy Plan: The Mirror GovSatCom Programme**

The use of the innovation partnership procedure requires a major effort both for the economic operators, who would have to engage in an operation with an uncertain outcome, but also for the public administration, which, if all the prerequisites required by the codified regulation were to be met, would have to commit itself to following a complex procedure requiring a high level of negotiation skills.

Indeed, according to the provisions of Art 65 of decreto legislativo 18 April 2016 no 50, contracting authorities are allowed to use the Innovation Partnership when they have to 'develop innovative products, services or works' and 'subsequently purchase the resulting supplies, services or works', if this need



cannot ‘on the basis of a reasoned determination, be satisfied by recourse to solutions already available on the market’.

However, since this is an alternative procedure for selecting the contractor or contractors to the other main procedures provided for by the code, a reasoned determination by the contracting authority is required, which will involve in-depth knowledge of what the market already offers in order to rule out the existence of solutions that are likely to satisfy the public interest.<sup>16</sup>

From a purely procedural point of view, the economic operators invited by the contracting authority have to send their request to participate within thirty days from the publication of the contract notice; more precisely, it is a procedure in stages, according to the development of the research and innovation process, at the end of which the contracting authority assesses the objectives achieved, those still to be achieved and the consequent remuneration, and may also decide to terminate the innovation partnership or, if there are several operators, to reduce the number of them by terminating the individual contracts, provided that it has provided for this possibility in the tender documents.

Nevertheless, the possibility that the contract notice allows the contracting authority to unilaterally terminate the partnership has a dissuasive effect on economic operators who, after having invested in the project and research activity, could see their efforts thwarted by the administration’s decision.<sup>17</sup>

However, the innovation partnership finds its principal expression in the phase of confrontation between the administration and the bidders called upon to propose innovative solutions, with a view to improving their content by means of negotiation phases for the initial bids and all subsequent bids, except for the final bids, which will be assessed for award on the basis of the ‘best value for money’. This is a criterion that allows bids to be judged without rigid evaluation schemes, suitable for a procedure that enhances the negotiating autonomy of the parties.

What is required from the administration is to assume a highly specialised role, capable of understanding and identifying the most innovative solutions for its own needs.

Indeed, the administration should be able to position itself as an innovator. Moreover, it must be capable of understanding the alternatives present on the

<sup>16</sup> The contracting authority’s justification appears to be a kind of *probatio diabolica*, because it should be not easy to demonstrate the non-existence of useful solutions to satisfy the public interest as regards a product, service or work. It is not possible to ignore the difference between the discipline provided for by the Italian Code and that contained in Art 31 of Directive 2014/24/EU, which does not provide for a specific reason in support of the choice, but only that ‘In the tender documents the contracting authority shall identify the need for innovative products, services or works which cannot be satisfied by purchasing products, services or works available on the market’. L. Marraccini and G. Terracciano, ‘Partenariato per l’innovazione’, in M.A. Sandulli and R. De Nictolis eds, *Trattato sui contratti pubblici* (Milano: Giuffrè, 2020), III, 133.

<sup>17</sup> F. Gambardella, n 4 above, 149; C. Lamberti and S. Villamena, ‘Nuove direttive appalti’ *Urbanistica e appalti*, 875 (2015).

market for the goods, services or supplies it intends to acquire, and then to relate to the private party in a partnership relationship, for which there is still the risk of so-called information asymmetry.<sup>18</sup>

These and other issues are among the main themes analysed by the administrations that have participated and are still committed to the implementation of the national plan for the Space Economy,<sup>19</sup> which has identified the Partnership for Innovation as the most suitable tool for achieving innovative results through a complex system of funding.

More precisely, the national Space Economy plan is part of the strategy that, starting in 2014, has been promoted by the Italian Presidency of the Council of Ministers for the definition of the national policy in the space sector, since, in the view of the *Cabina di Regia* specifically created for its drafting, this plan will be able to enable Italy to transform the national space sector into one of the driving forces of the country's new growth.

It has been said that the Space Economy encompasses the production process that begins in the Upstream sector through research, development and construction of space infrastructures, which enables the implementation in the Downstream sector of related innovative products and services, such as services for environmental monitoring and weather forecasting.

It is clear that the growth of the Downstream sector is based on the quantity and variety of value-added services developed and managed by companies, especially SMEs with medium-high qualification staff.

From an operational perspective, the objectives set by the National Space Economy Plan require two parallel and complementary operations, one aimed at identifying the needs of economic operators, including those outside the sector, with regard to the development of new value-added services based on satellite data; the other aimed at organising the traditional channels of intervention of the national space policy with the resources and strengths of the regions interested in the spill-over effects of the Space Economy on their territories, operating mainly through the funding of space initiatives considered jointly suitable for this purpose.

These operations are based on joint co-financing using national funds, from the Development and Cohesion Fund, and regional funds, from the Regional Operational Programmes of the 2014-2020 programme.

The Plan, in fact, is based on a multi-regional cooperation programme aimed at promoting the supply of innovative technologies, services and products by enterprises and research competences from the respective territories, while the national intervention acts mainly on the innovative demand side by playing the

<sup>18</sup> About information asymmetry, see also L. Marraccini, 'The comparison of two project financing operations: the Line 5 of the Milan Metro and the London Tube' *Amministrativamente.com*, 11-12 (2017).

<sup>19</sup> Available at [www.mise.gov.it](http://www.mise.gov.it).

role of Buyers Group, through the use of the Innovation Partnership, pursuant to Art 65 of *decreto legislativo* 18 April 2016 no 50.

The implementation of the National Space Economy Plan is carried out through specific programmes, among which the Mirror GovSatCom Programme stands out, which, as mentioned above, through the Innovation Partnership intends to build and operate the Ital-GovSatCom satellite system for the provision of innovative institutional telecommunications services, or alternatively, to build innovative elements of this system.

As envisaged by the Space Economy Plan, for the implementation of the Mirror GovSatCom Programme it was also necessary to resort to the Multi-Regional Plan of aid for research and development, functional to the implementation objectives of the Innovation Partnership signed by the Minister for Economic Development and the Regions and Autonomous Provinces interested in supporting the implementation of the Ital-GovSatCom satellite system.<sup>20</sup>

The contracting authority is the Italian Space Agency (ASI), which published the call for tenders in June 2018,<sup>21</sup> describing the four-stage procedure.

The first phase was the pre-qualification phase, open to all interested parties who, from the date of publication of the call for tenders, had thirty days to submit their applications to ASI.

Once the examination of the applications was complete, the contracting authority selected the operators to be invited to the second phase of initial bidding and negotiation, ie those who did not have any grounds for exclusion under Art 80 of the Italian Public Contracts Code and who met the general requirements under Art 83 and the specific requirements set out in the pre-qualification specifications.

Finally, the companies that passed the previous stages submitted the final offer, not subject to negotiation, through which the successful bidder was identified, resulting in the signing of the contract, which took place in July 2019.<sup>22</sup>

ASI's decision to make use of the Innovation Partnership is certainly due to evaluations of a legal nature, which have taken into account the issues related to the regulation of State aid and intellectual property rights, in relation to which the European directives and the Italian Public Contracts Code leave a wide discretion to the contracting authority.

Arts 107 and 108 of the Treaty on the Functioning of the European Union (TFEU), in fact, prohibit state subsidies that distort competition in the internal market and affect trade between member states in a manner contrary to the common interest, with consequent implications also on the regime applicable to intellectual property rights in innovation partnerships which, in light of the

<sup>20</sup> For further details about the Mirror GovSatCom Programme, see also the Detailed Operational Plan of MirrorGovSatCom available at [www.mise.gov.it](http://www.mise.gov.it)

<sup>21</sup> Available at [www.asi.it](http://www.asi.it)

<sup>22</sup> 'Parte la Space Economy italiana. Assegnato il contratto per Ital-GovSatCom' *AirPress*, available at <https://tinyurl.com/4rmb3vk2> (last visited 30 June 2021).

codified discipline, is defined by the tender documents according to the discretion of the contracting authority.

On this point, recital 49 of Directive 2014/24/EU provides that contracting authorities should not use PPI in such a way as to prevent, restrict or distort competition.

After all, if the contracting authority does not decide to hold the property rights exclusively, but to share them with one or more private partners, there would be a risk that the benefits obtained through the innovation partnership would be used to develop other innovative goods, services or works to be marketed in a market other than the one specifically created with the PPI, thus enjoying advantages that distort competition.

With the Communication 'Framework for State aid for Research and Development and Innovation' of 27 June 2014, the European Commission expressed an intention to harmonise procurement and State aid disciplines, reaffirming the importance of promoting research and technological development and the strategic nature of the Europe 2020 objectives, in line with Art 179 TFEU; it is therefore stipulated that for contracts for research and development services, the Commission will consider that no State aid has been granted to undertakings when the price paid for the services fully reflects the market value of the benefits obtained by the public purchaser and the risks assumed by the supplier.

In this sense, the Innovation Partnership could be assimilated to research and development service contracts, at least for the first phase of the procedure, where the research and development activities are concentrated.<sup>23</sup>

However, the 2014 Communication states that one of two conditions must alternatively be met: the first,

all results which do not give rise to IPR may be widely disseminated, for example through publication, teaching or contribution to standardisation bodies in a way that allows other undertakings to reproduce them, and any IPR are fully allocated to the public purchaser;

the second, that

any service provider to which results giving rise to IPR are allocated is required to grant the public purchaser unlimited access to those results free of charge, and to grant access to third parties, for example by way of non-exclusive licenses, under market conditions.

With regard to the Mirror GovSatCom PPI, the intellectual and material property rights deriving from the performance of the research activities of

<sup>23</sup> S. Bigazzi, 'Le "innovazioni" del partenariato per l'innovazione', in A. Fioritto ed, *Nuove forme e nuove discipline del Partenariato Pubblico Privato* (Torino: Giappichelli, 2016), 215-220.

common interest to the public and private partners are jointly vested in ASI and the successful economic operator, who will therefore become co-owners according to their share of the financial participation, with the right of free use for the institutional purposes of the public party and the right of the PPI Partnership to the commercial exploitation of the new solutions and technologies developed with recognition of royalties to the public party itself.<sup>24</sup>

The above considerations make it evident that the innovation partnership is not, in general, always a linear and simple operation, but usually presents complex structures distinguished by successive phases.

The first phase of the Mirror GovSatCom PPI is dedicated to the research and development of innovative satellite telecommunications solutions and applications, based on an innovative GEO platform, in response to emerging advanced institutional requirements; the second phase, on the other hand, involves the creation and deployment of an innovative satellite system, called Ital-GovSatCom, for the provision of telecommunications services, the provision and marketing of which are the subject of the third and fourth phases.

The success of the operation depends above all on the first phase, which will last no longer than 24 months, during which a platform for testing and validating the services will have to be set up to allow feedback from the Buyers Group.

In this sense, the end of the first phase will amount to a pivotal moment, in which the Buyers Group will assess the interest in the services that can be provided by the system, possibly expressing the willingness to use and/or purchase with its own financial resources.

Each of the above-mentioned phases corresponds to objectives subject to evaluation and negotiation, bearing in mind also that the PPI may be interrupted, at the end of each phase, if the contracting authority considers that the objectives cannot be achieved or further negotiated.

The first objective relates to research and development activities to identify innovative solutions in line with the requirements for satellite telecommunication services set out in the 'Satellite Communication to support EU Security Policies and Infrastructures – High Level SATCOM User Requirements', which identifies and describes the requirements of Institutional Users for satellite communications necessary to support EU policies in the field of security and infrastructure. Furthermore, given that these services are not exclusively of institutional interest, the economic operator will also have to develop innovative applications and solutions of interest to the private customer market.

The second objective is the implementation and operation of the Ital-GovSatCom system, based on the research and development activities developed under the first objective. As regards the types of service envisaged, reference must first of all be made to a 'basic' service of instant communication (voice and

<sup>24</sup> See also the Detailed Operational Plan of MirrorGovSatCom available at [www.mise.gov.it](http://www.mise.gov.it)

text) at reduced bandwidth over the entire access area, ie the national territory, the Mediterranean Sea and other geographical areas of interest. There must then be 'permanent' broadband services over the primary area of interest, eg for the management of infrastructures and the provision of communication to other space systems, while, finally, there must be 'advanced' broadband communication services on demand (such as real-time imaging and video, videoconferencing) over the entire access area.

Service provision is therefore the third objective, to be achieved once the satellite has been successfully launched, with its final GEO orbit and commissioning.

Finally, the fourth objective is commercialisation, with the purchase of services by the Buyers Group and business users.

After describing the objectives of the MirrorGovSatCom Programme, the Detailed Operational Plan of MirrorGovSatCom<sup>25</sup> considers a further scenario, whereby, in the event that the ItalGovSatCom system cannot be built, the research and development activities of the first objective will be useful for the creation of innovative components and subsystems for the construction of civil and dual telecommunications satellites.

Such a complex system of objectives is necessary because the architecture of the ItalGovSatCom system itself is complex, since it is composed of a Flight Segment, consisting of the GEO satellite based on the innovative telecommunications platform, a Ground Segment, ie the control centres for the satellite and the telecommunications mission, as well as an Application Platform, ie a Service Hub and a platform for the development of applications; finally, there is the User Segment, consisting of the user terminals for the various types of Users.

In this regard, it should be stressed that the objectives can be negotiated by the parties, unlike the minimum requirements for the innovativeness of the supply or services developed in the PPI, which, together with the award criteria, cannot be negotiated. Thus, the partnership must be terminated if the contracting authority considers, at the end of each phase, that the minimum requirements have not been met.

#### **IV. Conclusion**

In order to modernise the administration, the legislator has recently been encouraging the spread of models that allow, and sometimes require, the participation of the private sector, in accordance with an approach that is gradually becoming established in a number of forms in the relationship between the public administration and the private sector, intended as a citizen,

<sup>25</sup> Available at [www.mise.gov.it](http://www.mise.gov.it)

user or economic operator.

In the field of public contracts, public-private cooperation has encountered strong resistance in the case of certain activities, such as the construction and management of public works or the provision of services, in which the public partner can benefit from financial resources and private know-how which, especially in the technological field, appears difficult for the public sector to acquire.

In this sense, the reference is obviously to forms of public-private partnership, in which the administration moves away from a role of direct intervention in the market, and instead takes on a role of organisation, regulation and control.

However, the partnership with the private party may also take place in forms that are different from the PPP and that fall rather within the procedures for the selection of the contractor, among which the innovation partnership has been introduced.

Indeed, the fact that in the innovation partnership there is a form of partnership with a private party should not lead to any confusion between the procedure established *ex novo* by Art 31 of Directive 2014/25/EU and the public-private partnership.<sup>26</sup>

The innovation partnership is not part of the PPP scheme, whether purely contractual or institutionalised, since it is not intended to award the contract for the implementation or management of a public work or service, but merely to encourage the contracting authorities to work with the private sector to develop innovative products, services or works and subsequently to purchase what has been produced, provided that the product or service can be supplied or the works can be carried out to agreed performance levels and costs.

It is therefore an alternative way of choosing the contractor, albeit characterised by a more intense form of cooperation than the open and restricted procedures.

On the other hand, it would seem that the element of connection between the PPP and the innovation partnership is the fact that in both procedures the identification of the economic-financial balance is of crucial importance, since in both cases there is a real risk that the asymmetry of information between the public partner and the private partner will lead to the conclusion of opaque contracts, with a strong imbalance in the allocation of risks and responsibilities.

The special feature of the innovation partnership is that, compared to other procedures for the selection of contractors and, in particular, to the competitive dialogue, this instrument allows the best possible exploitation of the potential of the private sector, since the need of the contracting authority cannot be satisfied by solutions already available on the market.

As mentioned above, administrations need to develop innovative products, services or works and, therefore, initiate a long-term procedure aimed at

<sup>26</sup> L. Marraccini and G. Terracciano, n 16 above, 141.

achieving solutions, divided into successive phases with verification of intermediate results, and characterised by strong public-private cooperation for the negotiation of proposals and tenders.

In this way, a contracting procedure becomes a tool for smart, sustainable, inclusive growth, in line with the European Commission's guidelines contained in Communication COM (2010) 2020 final, 'Europe 2020 – A strategy for smart, sustainable and inclusive growth'.

With particular reference to the use of the instrument of the innovation partnership within the Italian Space Economy, it can be seen that it was a successful choice.

The procedure governed by Art 65 of the Italian Public Contracts Code, in fact, seems the most suitable for this kind of operations, where the public subject has to satisfy a need but there are no solutions available on the market and, consequently, a solution has to be developed in collaboration with the private sector.

In particular, the use of the innovation partnership seems to be more appropriate than competitive dialogue, which is more adequate in cases where there are significant information asymmetries between public and private partners.

In this case, however, it would not appear that there has been a disproportionate information asymmetry between the administration and the private sector, since the Italian Space Agency plays the role of contracting authority. Moreover, it ought to be taken into account that the Italian Space Agency is the national public body called upon, among other things, to promote national excellence in the research and development sector in the space field and a high level of competitiveness of the Italian industrial sector, with particular reference to small and medium-sized enterprises (SMEs), in order to be able to make the most of their competitiveness and capacity for innovation.

It was also essential that the Buyers Group carry out a proper needs assessment phase for the purposes of the technical and economic sizing of the project, with particular reference to the expected requirements for satellite communication services.

Moreover, the involvement of institutional users takes place constantly in all phases of the Innovation Partnership, both during the specification phase of the minimum innovative requirements of the supply, through the consultation process, and during the research and development phases, with the detailed indication of the user requirements by the Buyers group. This also involves additional institutional users potentially interested in the services; at the end of the research and development phases of the innovation partnership, on the other hand, the service offer proposed by the economic operator will be evaluated and possibly committing to acquire the services made available downstream of the implementation phase, while during the Development and Implementation phase, the involvement of users will take place with the operational verification



of the solutions implemented and the use of the services.

On the basis of the considerations above, it seems, therefore, that the innovation partnership represents a testing ground for an important part of the Italian administration which, with the PPI GovSatCom, is beginning to come closer to the vision that European law has of it, ie a player that knows the market for the goods, services or works that it intends to acquire and, in this sense, acts as an innovator, able to imagine and design products not yet available on the market.

At the end of the innovation partnership procedure, in fact, a close collaboration is established with the private partner, with different characteristics compared to those of the contractual relationship that binds the administration to the contractor, also thanks to the progressive negotiation of the conditions of the final offer.

In perspective, contracting authorities should be able to make technically complex choices, such as the prior identification of conditions to terminate a contract in the medium term, or the relative termination of a partnership, ie limited to individual partners, decisions for which adequate technical expertise is required.