



Agenzia Spaziale Italiana

PROVA ORALE

12 dicembre 2022

**Bando n. 5/2022- Selezione pubblica, per titoli ed esami, per la copertura di n. 2 posti a tempo pieno e indeterminato nell’Agenzia Spaziale Italiana, nel profilo di Tecnologo, III livello professionale, 1^ fascia stipendiale - Area Innovazione New Space Economy - PROFILO T1**

### LISTA 1 (ESTRATTA)

#### Quesito n. 1

Descrivere sinteticamente le esperienze lavorative più rilevanti svolte e, ove possibile, riconnetterle al ruolo previsto dal bando.

#### Quesito n. 2

Relativamente al trasferimento tecnologico in ambito spaziale, illustrare le principali caratteristiche e problematiche correlate al cosiddetto “spin out”, ossia il trasferimento di tecnologie spaziali verso tecnologie non spaziali o terrestri.

#### Quesito n. 3

I Piani di Attività dell’Agenzia (art. 3 dello Statuto).

#### Prova di idoneità - MICROSOFT WINDOWS O SISTEMI EQUIVALENTI

Aprire un documento Word e scrivere il seguente testo:

“STATUTO ASI

Art. 1 - Natura giuridica e sede legale

L’Agenzia Spaziale Italiana (ASI), di seguito denominata Agenzia, è l’ente pubblico nazionale, ricompreso tra gli enti di ricerca di cui al decreto legislativo 25 novembre 2016, n. 218, avente il compito di promuovere, sviluppare e diffondere, con il ruolo di agenzia, la ricerca scientifica e tecnologica applicata al settore spaziale e aerospaziale”

Giustificare il testo

Applicare il font “Times new roman”

Mettere le parole “STATUTO ASI” al centro

Salvare sul desktop il documento con il nome “PROVA nome cognome”.

#### Prova di idoneità - LINGUA INGLESE

Leggere e tradurre il seguente testo

*Space Economy activities to support ESA Council at Ministerial level, CM22*

Space activities and capabilities significantly contribute to Europe’s leadership in science, technology and innovation, and support Europe’s economy and society towards more responsibility, resilience and autonomy. Space provides crucial solutions and support for monitoring, early warning, or emergency responses in case of catastrophic events. Space missions inspire, protect future generations and shape our economic growth.

Space infrastructure and its applications will play a crucial role in supporting Europe in overcoming the challenges it faces. Continuous public investment in space will remain essential to ensure sustainability and to prevent the loss of R&D capabilities and critical skills which safeguard and strengthen Europe’s sovereignty. At the ESA Council Meeting at Ministerial level, CM22, 14 independent socio-economic studies will support critical decisions while providing evidence of the value generated by space in Europe.



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## LISTA 2

### Quesito n. 1

Descrivere sinteticamente le esperienze lavorative più rilevanti svolte e, ove possibile, riconnetterle al ruolo previsto dal bando.

### Quesito n. 2

Relativamente al trasferimento tecnologico in ambito spaziale, illustrare le principali caratteristiche e problematiche correlate al cosiddetto “spin in”, ossia il trasferimento di tecnologie non spaziali o terrestri verso tecnologie spaziali.

### Quesito n. 3

Il Direttore generale dell’ASI (art 12 dello Statuto)

### Prova di idoneità - MICROSOFT WINDOWS O SISTEMI EQUIVALENTI

Aprire un foglio Excel e creare la seguente tabella:

Programma	Fase	2024	2025
Programma Alfa	Fasi A	500	800
Programma Alfa	Fase B	700	400
Programma Beta	Fasi A	600	500
Programma Beta	Fase B	500	600

Applicare il grassetto alla prima riga

Allineare al centro della cella i valori della prima colonna

Calcolare il costo complessivo delle fasi A dei due Programmi Alfa e Beta

Salvare sul desktop il documento con il nome “PROVA nome cognome”.

### Prova di idoneità - LINGUA INGLESE

Leggere e tradurre la parte in grassetto del seguente testo

*ESPI Yearbook 2021 – Space Policies, Issues, and Trends of the European space sector in a global context*

**In July 2022, the European Space Policy Institute (ESPI) published its annual Yearbook. The report provides an examination of the main trends and developments in the space sector, space policy, and space programmes over the past year. Implementing a worldwide scope, but highlighting topics expected to impact the future of the European space sector, the ESPI yearbook presents Europe’s position within the international space landscape.**

**An unprecedented growth in satellite constellation, entries of cloud based service companies, and in-orbit operation technologies, are presented as the most impactful business trends of the space sector in 2021. The ongoing rise of space tourism and the development of commercial space stations are also highlighted.**

**Regarding space policy, developments impacting the sector in 2021 include:**



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- **Shifts in international cooperation in (human) space flight & exploration**
- **Government focus on enabling the commercial space sector**
- **Space on high-level political agendas (e.g. G7 & G20 summits)**
- **New national space laws**
- **Countries ambition for independent access to space**

ESPI reports 144 orbital launches worldwide in 2021, an 26% increase compared to 2020. This is accompanied by a record number of 1,843 satellites being launched, mainly driven by mega-constellations.

ESA Space Economy Team presents a paper on “Statistic and thematic satellite accounts for measuring the Space Economy” at the 73rd International Astronautical Congress (IAC) in Paris

On 20 September 2022, the ESA Space Economy team will present a paper on ‘Statistic and thematic satellite accounts for measuring the Space Economy’, co-written with the Organisation for Economic Co-operation and Development (OECD) and the US Bureau of Economic Analysis (BEA) at the occasion of the 73rd International Astronautical Congress (IAC) to be held in Paris on 18-22 September. The presentation will be given at the technical session E3.3 on “Economic analysis of both actual and potential future benefits from space activities and applications to nations and peoples”.

In the context of current economic, environmental and societal issues, space has an ever more important role to play. Yet, a robust set of consistent and reliable data is needed to both size and monitor the actual trends of the Space Economy.

Current estimates rely mostly on industry survey, leaving many data gaps, as well as a wide divergence within the available literature on how much is worth the Space Economy. While the figures provide interesting insights across the various segments of the space industry, they also highlight shortcomings in terms of how space contributes to the economy, especially through comparable indicators such as output, gross value-added (GVA) or employment.

Thematic satellite accounts are a complementary set of statistics within the central framework of national accounts. They allow to highlight specific sectors of the economy that may not be obvious to find in the core set by identifying and quantifying relevant products (goods and services) across industries and economic activities.

The presented paper aims at investigating the potential of satellite account approaches for measuring and monitoring the Space Economy. It presents current limitations in the available measures of the Space Economy, results and lessons learnt from the US Bureau of Economic Analysis experience on their SESA (Space Economy satellite account) as well as insights from the OECD and the new cooperation project at European level between the European Space Agency, Eurostat and the Joint Research Centre (JRC).



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### LISTA 3 (ESTRATTA)

#### Quesito n. 1

Descrivere sinteticamente le esperienze lavorative più rilevanti svolte e, ove possibile, riconnetterle al ruolo previsto dal bando.

#### Quesito n. 2

Relativamente al trasferimento tecnologico in ambito spaziale, illustrare l’importanza della gestione della proprietà intellettuale e del suo sviluppo.

#### Quesito n. 3

Il reato di concussione

#### Prova di idoneità - MICROSOFT WINDOWS O SISTEMI EQUIVALENTI

Aprire un documento Word e scrivere il seguente testo:

“STATUTO ASI

Art. 3 - Piani di attività

L’Agenzia predispone, sulla base degli indirizzi del Presidente del Consiglio dei Ministri o del Ministro o Sottosegretario di Stato delegato e del Comitato interministeriale per le politiche relative allo spazio e alla ricerca aerospaziale, il Documento strategico di politica spaziale nazionale (DSPSN).”

Applicare l’interlinea pari 1,5

Applicare il grassetto alle parole “STATUTO ASI”

Applicare il colore azzurro al testo “Art. 3 - Piani di attività”

Salvare sul desktop il documento con il nome “PROVA nome cognome”.

#### Prova di idoneità - LINGUA INGLESE

Leggere e tradurre la parte in grassetto del seguente testo

*ESPI Yearbook 2021 – Space Policies, Issues, and Trends of the European space sector in a global context*

In July 2022, the European Space Policy Institute (ESPI) published its annual Yearbook. The report provides an examination of the main trends and developments in the space sector, space policy, and space programmes over the past year. Implementing a worldwide scope, but highlighting topics expected to impact the future of the European space sector, the ESPI yearbook presents Europe’s position within the international space landscape.

An unprecedented growth in satellite constellation, entries of cloud based service companies, and in-orbit operation technologies, are presented as the most impactful business trends of the space sector in 2021. The ongoing rise of space tourism and the development of commercial space stations are also highlighted.

Regarding space policy, developments impacting the sector in 2021 include:

- Shifts in international cooperation in (human) space flight & exploration



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- Government focus on enabling the commercial space sector
- Space on high-level political agendas (e.g. G7 & G20 summits)
- New national space laws
- Countries ambition for independent access to space

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**In the context of current economic, environmental and societal issues, space has an ever more important role to play. Yet, a robust set of consistent and reliable data is needed to both size and monitor the actual trends of the Space Economy.**

Current estimates rely mostly on industry survey, leaving many data gaps, as well as a wide divergence within the available literature on how much is worth the Space Economy. While the figures provide interesting insights across the various segments of the space industry, they also highlight shortcomings in terms of how space contributes to the economy, especially through comparable indicators such as output, gross value-added (GVA) or employment.

Thematic satellite accounts are a complementary set of statistics within the central framework of national accounts. They allow to highlight specific sectors of the economy that may not be obvious to find in the core set by identifying and quantifying relevant products (goods and services) across industries and economic activities.

The presented paper aims at investigating the potential of satellite account approaches for measuring and monitoring the Space Economy. It presents current limitations in the available measures of the Space Economy, results and lessons learnt from the US Bureau of Economic Analysis experience on their SESA (Space Economy satellite account) as well as insights from the OECD and the new cooperation project at European level between the European Space Agency, Eurostat and the Joint Research Centre (JRC).



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#### LISTA 4 (ESTRATTA)

##### Quesito n. 1

Descrivere sinteticamente le esperienze lavorative più rilevanti svolte e, ove possibile, riconnetterle al ruolo previsto dal bando.

##### Quesito n. 2

Relativamente al trasferimento tecnologico in ambito spaziale, spiegare la rilevanza degli strumenti finanziari e illustrare le specifiche modalità ritenute più efficaci per il suo sviluppo.

##### Quesito n. 3

Gli organi dell’ASI: il Collegio dei revisori dei conti e le sue funzioni

#### Prova di idoneità - MICROSOFT WINDOWS O SISTEMI EQUIVALENTI

Aprire un foglio Excel e creare la seguente tabella:

Reparto	Fatturato 2020	Fatturato 2021	Totale
Alfa	40.000	25.000	
Beta	20.000	15.000	
Gamma	30.000	20.000	

Applicare il grassetto alla prima riga

Formattare lo stile delle colonne in modo che i numeri abbiano due cifre decimali

Calcolare il totale della terza colonna

Salvare sul desktop il documento con il nome “PROVA nome cognome”.

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## LISTA 5

### Quesito n. 1

Descrivere sinteticamente le esperienze lavorative più rilevanti svolte e, ove possibile, riconnetterle al ruolo previsto dal bando.

### Quesito n. 2

Argomentare le ragioni per le quali l’innovazione è considerata motore di sviluppo economico, facendo particolare riferimento a quella legata al trasferimento tecnologico.

### Quesito n. 3

Il provvedimento amministrativo

### Prova di idoneità - MICROSOFT WINDOWS O SISTEMI EQUIVALENTI

Aprire un foglio Excel e creare la seguente tabella:

Giorni di pioggia	gennaio	febbraio	marzo
2019	10	8	7
2020	12	7	5
2021	9	9	8
Valore medio			

Applicare il grassetto alla prima riga

Allineare al centro della cella tutti i valori (numeri e testo)

Calcolare il valore medio nell’ultima riga

Salvare sul desktop il documento con il nome “PROVA nome cognome”.

### Prova di idoneità - LINGUA INGLESE

*Space: investing in the final frontiers. Will declining launch costs, advances in technology and rising public-sector interest position space exploration as the next trillion-dollar industry?*

It’s been nearly half a century since humans left footprints on the moon and during that time, human space exploration has largely centered on manned low-Earth orbit missions and unmanned scientific exploration. But now, high levels of private funding, advances in technology and growing public-sector interest is renewing the call to look toward the stars.

The investment implications for a more accessible, less expensive reach into outer space could be significant, with potential opportunities in fields such as satellite broadband, high-speed product delivery and perhaps even human space travel. While the most recent space exploration efforts have been driven by handful of private companies, the establishment of a sixth branch of the U.S. military in 2019—the “Space Force”—along with growing interest from Russia and China, means public-sector investment may also increase in the coming years.

To outline progress in space from both public and private companies, as well as government efforts, the Space team at Morgan Stanley Research has been examining these developments to detail the constellation of potential opportunities for investors.