TOWARDS AN EVOLUTION OF THE ESA GEOGRAPHICAL RETURN

FINDING THE RIGHT BALANCE BETWEEN SAFEGUARDING THE INVESTMENTS OF MEMBER STATES AND AN INCREASED COMPETITIVENESS OF THE EUROPEAN SPACE SECTOR

Preamble

The "geographical return" is a system set up with the European Space Agency (ESA) Convention to attract Member States to invest in space programmes by guaranteeing that their investment will be "returned" in the form of contracts with their national industry, for an amount proportional to each country's investment (minus ESA's management costs).

This system has one major merit: **having enabled the creation and development (and geographical structuring) of the European space sector**. Geo-return has now become the guarantee of an institutional financing of the European space sector which, if it were to disappear, is **hard to imagine how it could be compensated for**.

However, **the system has also its limitations**. The first one does not lie in the rule itself, but in the inevitable **fragmentation** and the large **control mechanism** that needs to be instantiated by the Agency to implement the process. Moreover, with the advent of commercial programmes and applications, the **need to (rapidly) offer return on investment** is more and more apparent as is the need for ensuring the **sustainability** and **competitiveness** of **strong European supply chains**.

As part of the current ESA transformation exercise put forward in ESA Agenda 2025, the **Agency has highlighted the need to improve its procurement process to make it leaner and more expedite**. The evolution of the geo-return policy, currently discussed by ESA with its Member States is part of such exercise; but it is a **delicate balance** between the needs to safeguard the opportunities and investments of Member States, and in particular the "emerging" ones, and the above-mentioned leaner procurement goals.

In light of the proposed measures currently discussed by ESA with its Member States, the European space industry, represented by Eurospace, wishes to **share its feedback on the evolution such system should pursue**. Eurospace member companies – that are of all sizes, roles in the supply chains and geographical belongings – acknowledge the **very strong structuring effect of the georeturn rule on the European space industry**, and hence the **difficulty to find a "one-size-fits-all" direction for its evolution**; i.e., a direction that would both allow for an increased competitiveness of the sector as a whole and the growth of every individual Eurospace member.

We therefore chose to use this paper not only to identify **measures that are consensually supported by industry** but also to synthetise the **sometimes-diverging views that might exist** regarding some other possible evolutions of the georeturn rule.

The paper is organised in three parts:

1. Remarks on possible evolution schemes (some of them may have been part of the original ESA proposal);
2. Industry comments to the ESA proposed measures;
3. Eurospace comments to the proposals that are not requesting special approval by MS (as they are in the mandate of the Agency)

1) Remarks on possible evolution schemes (that are no longer part of the original ESA proposal)

1.1) Manage geo-return on an aggregated level (domains/directorates)

Some companies within the European space industry consider that **managing the georeturn on an aggregated level** (e.g. "envelope programmes" or even an aggregation at directorate level) would have provided **larger flexibility in geo-return re-balancing** across different elements belonging to the same domain.

Other companies consider that such an aggregation would introduce the **risk of undermining the quality of work** awarded to medium-size companies or SMEs.

1.2) Application of geo-return criteria to the procurement of commercial services

It is deemed logical that this measure should also **allow for a (small) contribution from companies of (originally) non-participating states**.

On this topic, the European space industry recommends that a **fair access and contribution of supply chain must be ensured**, meaning that supply chain shall not be cut out from the development of commercial services because georeturn will not exist or be strongly relaxed. If suppliers are requested to share the risk, they should have a **proportional participation in the business model**, although they might also be only suppliers without risk (and potential benefit).

To go deeper into details, the **level of application of the geo-return criteria has to be commensurate to the volume of service purchased by ESA**: if ESA buys the largest part of the service capability, it is appropriate to sell at ESA conditions (e.g., in agreement with the applicable geo-return rules). But if ESA is only a minority customer, the application of geo-return rules shall **not impact the final selling price to other (non-ESA) customers** and the commercial operator shall be allowed to sell at its own Terms & Conditions.

In addition, commercial programmes can have long implementation (and Return on Investment) time. While some companies believe that the **fragmentation of programmes into batches may hamper the creation of a critical mass of demand** that would enable the emergence of stabilised supply chains of recurring, viable and profitable products in Europe, some other believe that ESA proposing a **greater range of small/medium size missions might benefit the emergence and profitability of small to mid-size companies**.

This proposal is closely linked to Fair Return proposal. Industry would also like to draw the attention of ESA to the fact that the **"commercial approach" should not be detrimental to the creation of European capabilities** simply because those solutions are existing somewhere else outside of Europe.

1.3) Incentives for Primes to take on "new / emerging" companies

The European space industry recognises the **need to balance programme subscription with industrial capacities in the Member States**.

If special incentives to onboard new/emerging companies in ESA programmes are ruled out, some companies believe that it is then **not recommended to use programmes subscription as a vehicle to "force" industrial growth in countries with limited/immature industrial capacities**, because it induces more risks in the industrial proposals and make customers price targets less credible.

Instead, it is recommended that **dedicated industrial development programmes or special measures to accelerate industrial products maturity** (GSTP-like, Requesting Party Agreements – RPA – or Industry Incentive Schemes - IIS) are exploited to the maximum possible extent (possibly with larger budgets).

While fostering competition, **Europe will have to ensure that it consolidates the ecosystem rather than fragmenting it**. Structuring tenders that are long-term and ensure continuity of funding across the entire range of TRLs (especially in high TRLs that require more substantial funding) are needed to strengthen the European supply chain.

2) Eurospace comments to the ESA proposed measures

2.1) Avoid an increase of the guaranteed minimum Return Coefficient

Industry strongly supports no (further) increase of the guaranteed minimum return of 0.93 because it is likely to further increase the ESA internal controlling costs and will make the procurement process less flexible.

From an industry standpoint, the following is observed:

- In some development programmes, on topics where international competition is increasing, the focus of ESA should be to **aim first at maximising the competitiveness of European solutions**, even if it requires ease in specific conditions the constraints of geo return;
- At the same time, in some selected procurements (i.e., chosen projects that can be used as forerunners of this new scheme), **ESA could consider offering larger geo-return corridors** (i.e., the fork within which companies have to move to provide a compliant offer to the Agency) for each Member State to provide wider suppliers choice, and foster natural European competition.

2.2) Fair contribution

A number of industries consider that the system of "fair contribution" (i.e., calculating the contribution of participating member States after the selection of suppliers) could be a **good example to be applied to future commercial projects**. The **provision by ESA of an end-to-end example** to clarify the various necessary steps of the process and e.g., avoid the overshoot/saturation of contributions that will not meet the Member States financial capabilities/objectives, is very much welcome. In addition, attention needs to be paid to avoid that such a system prevents industries, from countries where Industry would have been particularly successful in such a "fair contribution" programme, to bid in other tenders.

On the other hand, a number of other industries do not support the system of "fair contribution" as it would **risk challenging the full-consortium approach** (i.e., meaning that the principle of fair competition would no longer be a priority). A "fair contribution" approach should make sure that **clear industrial procurement rules are implemented** in order to ensure the fair involvement and participation of the supply chain. This will **help to**

sustain a healthy ecosystem in Europe and **avoid excessive verticalisation** of all competences within a few large players only.

2.3) Revisiting the weighting factors

Industry recommends to consider the application of the same approach of weighing technical infrastructure, test centres, laboratories and mission operations [whatever it will be] **to industry-owned infrastructure**.

In addition, the European space industry proposes that elements that are indirectly contributing to the programme development (e.g., transport costs, insurance costs) receive a **similar treatment with the reduction, if not zeroing, of the weighting factor**.

2.4) Special geo-return management of the Prime contractor payload-related activities in the Science Programme

The reduction of the weighting factor for Prime Contractors activities in Science Programmes focused on specific support to payload development and accommodation activities is welcome (although it is **not expected to have a significative impact on the overall program georeturn percentages**).

2.5) Possibility to transfer contributions among programmes per Domain (a la "Artes")

Industry believes that the proposed approach to foresee the **possibility of inter-programmes transfers** within the same domain will **provide more flexibility** in the management of the geo-return and help to compensate eventual geo-return unbalances.

However, this approach **might have limited benefits** as it cannot be implemented *a posteriori* for Missions programme. Significant transfer of funding or contribution changes might destabilise the programme and impact its attractiveness.

3) Eurospace comments to the proposals that are not requesting special approval and that are in the mandate of the Agency

In its analysis, ESA had identified a number of measures that could automatically be implemented because authorised by its mandate. Some of them are relevant for the European space industry:

- **The introduction of small/medium mission concepts is generally welcome** as it provides more direct visibility and leadership in smaller Member States and smaller companies. Moreover, it may provide **opportunities for smaller players to act as primes and provide higher level integration activities**; the principle shall require proper planning ahead and not be treated as a compensatory measure, in order to limit its impact (i.e., less available budget) on larger programmes;
- The **use of digital tools to ease the integration of roadmaps** is considered **essential** for the evolution of geo-return:
    - Technology maturation support (e.g., GSTP) measures should be **better linked to programme needs**; the coordination of mid to high TRL developments between programmes (GSTP, ARTES, FLPP etc.) and between funding sources (national programmes, ESA optional programmes, EU programmes) could be reinforced with a more effective management of RD&T activities, and more visibility on plans and achievements;

- Technology development and financing shall be **closely coordinated with domain pre-development budget**. The latter allows the upgrade in maturity and tailoring to the mission needs;
- It is underlined that the primes have the best view of the needed technology which are at stake for the upcoming programmes; their **involvement to support ESA to define the D/TEC R&T strategy** is essential and shall be facilitated and better recognised. Still, if this may be true at programme level, disruptive innovations also come from Midcaps and SMEs; therefore, the **involvement of Midcaps and SMEs in the dialogue with ESA** shall also be common practice. It is expected that technology development in co-funding would only apply when market opportunities to recoup the investment exist (and are guaranteed).