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**POLAND'S POLICY IN THE SPACE SECTOR:  
THE INSTITUTIONAL DIMENSION SINCE JOINING  
THE EUROPEAN SPACE AGENCY**

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**ORCID** no. 0000-0001-7173-2389**e-mail:** bartosz.smolik@uwr.edu.pl**Abstract**

This paper discusses Poland's policy approach regarding the space-sector. The paper covers the period from 2012 to the end of 2019, i.e. the period of Poland's membership in the European Space Agency. It tackles the institutional development of the sector. The paper's main thesis is that positive developments occurred during the analysed period supporting development of the Polish space sector, which however has not resulted in transparent responsibility-division or their concentration in a single ministry. On the contrary, competence disputes have intensified. These disputes do not strengthen the position of the space sector, nor the evolution of the Polish Space Agency. The statutory changes have actually led to the degradation of the significance of the Polish Space Agency and its transition from a space policy integrator to the expert support structure of individual ministries. Therefore, there is no strong entity capable of effective coordination and promotion of Polish space policy in the country and abroad.

**Keywords:** space policy, Polish space sector, Polish Space Agency, space industry**Introduction**

The purpose of the paper is to discuss Poland's policy in the space sector after 2012, so during Poland's membership in the European Union and after it joined the European Space Agency. The paper specifically discusses the institutional development of that sector. The main thesis of the paper is that positive developments occurred during the analysed period supporting the development of the sector in Poland. However, at the same time, the sector<sup>1</sup> itself demonstrated its structural limitations, including contradictions between the ministries responsible for Polish space policy and the absence of an imple-

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1 In term of "sector" I understand the wide catalogue of Polish entities, beginning from space industry, research and development institutes, similar to NGO organizations.

menting institution with strong and transparent responsibilities. The Polish Space Agency (usually referred to as POLSA) does not fulfil that role.

This paper, due to the limited wordspace, will deal only with the crucial issues of Poland's current space policy from 2012–2019, which directly affected its institutional dimension. This period covers the operation of the influential *Interministerial Team for Space Policy* (MZPK). Therefore, overly detailed technological and programme issues related to the analysis of the Polish Space Strategy and the National Space Program, as well as personnel matters have been streamlined. The author analysed documents, including legal acts, and other sources using elements of institutional and legal analysis. In addition to commonly available documents, the *Interministerial Team for Space Policy* reports from 2012–2018 and the Parliamentary Space Group (PGPK) reports from the same period were also used<sup>2</sup>. Several press publications from specialised and popular portals were also used. The literature used was supplemented by political, legal and industry publications.

### First examples of international cooperation after 1989

Since 1991, Poland has been cooperating with the European Space Agency (ESA), which was associating mainly with Western European countries at the time. The cooperation was initiated by the Space Research Centre of the Polish Academy of Sciences. In 1994, both parties signed a cooperation agreement for the peaceful use of space and that agreement was enhanced in 2002 (Porozumienie, 2–11). As a result of that agreement, the Polish scientific and research centres participated or participate in the implementation of most of ESA's flagship programs, such as Cassini-Huygens, Rosetta, Mars Express, Venus Express, the BepiColombo space probe missions, INTEGRAL and, Herschel space observatories projects and other (Sięgając gwiazd, 4–5).

On 27 April 2007, Poland signed an agreement with ESA on the European Cooperating States [Plan for European Cooperating States (PECS)]. It became the fourth country in Central and Eastern Europe to accede to this type of agreement after Hungary, the Czech Republic and Romania. The agreement initiated by ESA was to prepare the mentioned countries for membership in ESA (Umowa, 2007). It made it possible to finalise 45 projects implemented by Polish companies, research centres and universities for a total amount of EUR 11.5 million (Zawistowski 2015, 3). A year later, the so-called PECS card was signed enabling Poland to benefit from ESA activities (signed by the President in 2012).

In 2009, Poland became a member of the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT). It allowed Poland to have full access to data from satellites owned and managed by this organisation. Poland also gained the right to participate in key decisions made by EUMETSAT (in return, however, it was obliged to pay a high membership fee, which in 2017 reached EUR 13.2 million per annum, and then slowly decreased (Protokół z VIII posiedzenia, 2014, 3). EUMETSAT cooperates closely with ESA, but unlike the latter, it does not apply the principle of geographical redistribution, which allows the recovery of part of the contribution through tenders addressed to companies originating from individual countries that have paid for it<sup>3</sup>. During the above

2 These documents were released to author by Ministry of Development and Chancellery of the Sejm.

3 Polish companies can participate in the tenders since 23 May 2014, i.e. from the date of entry into force of the Protocol on privileges recognising the immunities and privileges of the officials of that organ-

period, the Ministry of Environment was responsible during the above period for contacts with EUMETSAT, while the Ministry of Economy (Polkowska, Ryzenko, 2016, 345) was the leading ministry in the implementation of Poland's space policy.

### **Ground-breaking membership in the European Space Agency**

On November 19, 2012, Poland became the full-fledged 20<sup>th</sup> Member State of ESA (Umoowa, 2012). There were high hopes related to this in Poland. These included the use of knowledge and experience of other countries, establishing contacts with new partners, using the ESA infrastructure, participating in “ground-breaking projects” as well as implementing Polish projects under ESA as well as deriving profits from the increase of export and trade turnover as a consequence of acquiring additional competences in the field of space and satellite technologies (Jakie korzyści, 2012).

The Polish membership fee in ESA was to include both mandatory programs and optional programs. In the first case, the sum was to be distributed in open competitions between entities from all ESA member countries, while in the second, the so-called geographical distribution was to be applied, i.e. a proportional refund of the voluntary part of the premium in the form of competitions dedicated to domestic companies. In addition, Poland was to pay a one-off initial fee for acquiring joint ownership right to ESA infrastructure in the amount of EUR 11.1 million (signed by President in 2012). In 2018, the obligatory part of the premium was EUR 23 million. It was planned that in accordance with the assumptions of the Polish Space Strategy, an optional part was to be added to it in 2019 in the amount of not less than 34.5 million euros (150%), while in 2020 not less than 46 million euros (200%) (Protokół z XXI posiedzenia, 2018, 7).

It should be mentioned that the level of the Polish contribution was the main reason for the resistance of the Polish government, in particular the Ministry of Finance, and the protracted accession negotiations (lasting from November 2011 to April 2012, eventually signed by the President in late 2012). After three years, reservations were raised by some ministries that participated in payments. In 2016, the Ministry of National Defence proposed to reduce its own contribution by increasing the number of ministries paying the premium from 5 to 13, and therefore all those whose representatives participated in the deliberations of the *Interministerial Team for Space Policy* established in 2012 (Protokół z XV posiedzenia, 2016, 5; Zarządzenie nr 102). On the other hand, the efforts of Polish commercial companies and research centres with both domestic and foreign capital to increase the premium have become apparent. These desires were expressed by industry organisations such as the Association of Space Sector Employers (ZPSK) (Protokół z XIV posiedzenia, 2016, s. 3).

Poland's accession agreement with ESA provided for the creation of a special mechanism to support Polish entities applying for funds from the Agency. According to that agreement, 45% of the compulsory part of the Polish contribution was to be allocated to the PLIIS programme: the Polish Industry Incentive Scheme. These were activities aimed at adapting Polish industry operators as well as the entire scientific community to the ESA requirements. PLIIS was to enable Polish companies to join the supply chain for the largest European companies from the Airspace sector. (Burdzy, 2017, 80).

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isation that was ratified earlier by Poland

Initially, the programme was to operate in the years 2013–2017, but after the intervention of the Polish government, ESA agreed to extend its operation for another two years until the end of 2019. This was considered a negotiation success of the Polish government because ESA agreed for the first time in its history to extend the transition period (Polska utrzymuje, 2017). However, the question remains whether this, in general, efficient program, will help to adapt Polish companies to the broad free market reality and thrive in it, or only will tie them closer to large Western European dominant entities among service providers for ESA, such as Airbus Defence and Space, Thales Alenia Space, OHB SE, and RUAG SPACE<sup>4</sup>.

An important factor in technological development within ESA is readiness to cooperate under optional programs, which are implemented in parallel with mandatory programs. During the ESA Ministerial Council in December 2016 in Lucerne, Polish representatives declared their readiness to participate financially in a total of 10 programs. All of them are to be implemented in the 2017–2021 period and relate to areas such as Earth observation, telecommunications systems, support of the European Galileo satellite navigation system, support of small launch systems, programmes related to space environment hazards such as Space Situational Awareness, general technological support for space missions, and support for technological transfers from scientific centres to industry. In total, Poland allocated EUR 44.95 million for this activity (Krajowy Program Kosmiczny, 2018, p. 25).

In summary, post-2012, the foundations were created for a much faster than before development of the space sector in Poland. The analysis of the sector in a report prepared by the POLSA in 2017 shows that Poland has already managed to develop its “national specialisations”, i.e. areas such as electronics, mechanics, automation, robotics, and control systems. However, it is still considered that the most developed “branch” of the Polish space sector concerns integrated applications using satellite data. Therefore, this is a downstream area, i.e. a derivative of IT, which – as the authors of the report state – does not require additional support to enter the market (Analiza polskiego sektora, 2017, p. 50.). The companies supplying upstream technologies are still a minority, i.e. creating components of the orbital infrastructure, in particular those with competences and capabilities in the field of integrating satellite and space systems (Krajowy Program Kosmiczny, 2018, p. 10).

### **Institutionalisation of the Polish space sector**

Acceleration of the development of the Polish space sector is associated with its separation and institutionalisation. The first of these processes has been observed for a long time, while institutionalisation is mainly associated with the initiation of Poland's membership in ESA and, consequently, increased interest in the space industry. The Ministry of Economy was nominally responsible for the space sector in Poland before Poland's membership in ESA (This ministry has changed its name and authority several times to the Ministry of Development, Ministry of Entrepreneurship and Technology, and then changing in 2020 to the Ministry of Economic Development, Labour and Technology, and supporting the minister responsible for the economy<sup>5</sup>). However, the responsibilities were distribut-

4 These entities are named “large system integrators” by ESA. So far the Polish entities usually reach the level of technology providers or subsystem integrator. They are very often subcontractors of the former.

5 Because of aforementioned changes I use in this paper interchangeably the name of the Ministry

ed between a number of ministries, a situation typical of the departmentalised Poland syndrome. Various departments were responsible for European contacts and the development of various components of the space sector (Kotarski, 2010, p. 186). In the years 2011–2012, this division was as follows:

- **Ministry of Economy** – cooperation with ESA,
- **Ministry of National Defence** – cooperation with EDA (European Defence Agency),
- **Ministry of Infrastructure** – Galileo program – subsequently taken over by the Ministry of Digitisation,
- **Ministry of Science and Higher Education** – GMES/Copernicus program. Horizon 2020 Program, European Southern Observatory (ESO),
- **Ministry of Interior** – Galileo in the Public Regulated Service part (PRS),
- **Ministry of Environment** – cooperation with EUMETSAT (Juźwik, 2011, 167; O polskim sektorze).

As Czesław Juźwik notes, despite the significant scientific, technological, and industrial potential in Poland, systemic solutions integrating this sector were lacking at that time (Juźwik, 2011, p. 167). It should also be noted that there is no transparent institutional core responsible for space policy. The process of institutionalisation as well as the very emergence of the space sector in Poland gained greater dynamics in 2012. At that time, the important components of the Polish space sector were the CBK PAN, including in particular the Polish Space Office (O nas), as well as the Space and Satellite Research Committee of the PAN (Wolański, Banaszkiwicz, et al., 2008, p. 66) .

The aforementioned Interministerial Team for Space Policy in Poland (MZPK) was established on November 16, 2012, and operated until January 6, 2019. MZPK was to be a “coordination and information platform” for departments dealing with various areas of space activity. The tasks of the Team included coordinating activities resulting from Poland's membership in ESA, participating in the formulation of assumptions for space policy and programs related to the Polish space sector, assessment of the activity of the organisational unit within the Polish Agency for Enterprise Development (PARP), which in turn was intended to support entrepreneurship within the space sector. The final task of the Team was advising the Minister of Finance on the optional contribution to ESA (Zarządzenie nr. 102, 2012, p 1).

Therefore, one of the key reasons for establishing the Team was interministerial coordination of ESA activities. It was not an easy task by definition, as representatives of up to 19 departments were to participate in MZPK meetings, convened at least once every three months, excluding the financial minister's representative. In practice, however, these meetings were attended only by representatives of ministries directly interested in creating Polish space policy, and especially the departments participating in the annual ESA contribution. Throughout its entire existence, the Team was in fact the most important decision-making body regarding the space sector. On the other hand, the interference of the prime minister himself, who established the Team, is imperceptible<sup>6</sup>.

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of Economy, Ministry of Development, Ministry of Entrepreneurship and Technology and ministry competent for economy affairs.

6 Analysis of the minutes from the meetings of that body from the years 2012–2018 did not mention the name of the prime minister or prime minister himself. None of the officials was referring either to his guidelines or comments. The same applies to the officials from the Office of the Prime Minister.

An analysis of the Team's minutes from the period 2012–2018 made by the author shows that already at the beginning of 2013 work was started on the National Space Program, and thus the program comprehensively outlining the development of the Polish space sector (Protokół z II posiedzenia, 2013, p. 3). Therefore, the long duration of the creation of such a comprehensive document, which finally, after the change of power in Poland, gained the name of the Polish Space Strategy is puzzling. Apparently, it results from changes in the government made after the 2015 elections.

From the very beginning of the Team's operation, the annual Polish contribution to the ESA has become one of the main meeting topics (Protokół z I posiedzenia, 2012, p. 3). The main problem concerned making the contribution using the funds originating from the budgets of various ministries, which in turn necessitated an annual agreement between them. According to October 2016 data, the ESA contribution came from the budgets of five ministries, with the Ministry of National Defence (55 million)<sup>7</sup> contributing the most (Protokół z XVI posiedzenia, 2016, p. 3). As already mentioned, representatives of this ministry demanded equal payment of the obligatory part of the contribution by individual ministries and voluntarily financing of selected programs under the optional part<sup>8</sup> (Protokół z XVII posiedzenia, 2017, p. 3). Attempts to take over the entire payment directly by the-then Ministry of Entrepreneurship and Technology were suspended by the Ministry of Finance, which explained that they had to comply with the laws defining fixed expenditures (Protokół z XXIV posiedzenia, 2018, p. 3). Regardless, competence disputes are visible in regard to the implementation of selected areas of space policy between other ministries, such as the newly created Ministry of Administration and Digitisation and the Ministry of the Interior.

Overall, in addition to the traditional symptoms of 'departmentalised Poland', the analysed period shows the institutional weakness of the ministries subordinate to the finance ministry – as the main coordinator of Poland's space policy – in relation to other ministries jointly responsible for that policy, especially to the Ministry of National Defence and the Ministry of Interior and the-then MAC. It should be mentioned that pursuant to the ordinance of the Minister of Entrepreneurship and Technology of May 10 2019, a similar, but intra-ministerial Team for Space Policy will be created (Zarządzenie nr 15, 2019). However, the method of financing the Polish contribution to ESA has not changed, which may lead to further disputes between ministries in the future<sup>9</sup>.

During meetings of the Team, the lack of support of the finance ministry towards the parliamentary initiative of establishing the POLSA as a non-ministerial initiative brought forward by a group of deputies from various clubs associated in the Parliamentary Group on Space Affairs was clearly visible (Protokół z V posiedzenia, 2014, p. 6). From the point of view of the interests of the ministry seeking concentration of powers, this attitude is understandable, also affecting subsequent changes in the PSA Act subordinating agencies to the ministry. However, it demonstrates the great reluctance of ministries to share power

7 Participation of individual ministries in Polish contribution to ESA was as follows: Ministry of Foreign Affairs — 5 M PLN, Ministry of National Defence — 55 M PLN, Ministry of Science and Higher Education — 10 M PLN, Ministry of Development — 30 M PLN, Ministry of Environment — 25 M PLN.

8 For example, Ministry of National Defence was against covering the costs of broadly defined research within the Space Situational Awareness including sending the satellites to liberation points. Instead it proposed to narrow it to Space Surveillance Tracking program, space weather research and monitoring of space objects passing close to Earth.

9 Information obtained by the author from the Ministry of Development in February 2019.

not only among themselves but also with government executive agencies (Ferfecki, 2017). A Task Force for contacts with ESA was established in March 2013. It is composed of seven representatives of individual ministries and ESA representatives (Task Force PI-ESA). The purpose of the Task Force is to support the Polish space sector in acquisition of the financial projects and in cooperation with the entities from other member states. It was assumed that this would enable effective utilisation of 45 percent of the obligatory contribution directed to PLLIS preferential programs dedicated exclusively to Polish companies (Protokół z I posiedzenia, 2012, p. 3). PLLIS Program and the Task Force were supposed to operate to the end of 2019 (Polska Strategia Kosmiczna, 2017, p. 52).

In the case of the Sejm (lower chamber of the Parliament) and the Senate, the same issues were tackled by the ongoing (9<sup>th</sup> Term of the Parliament) Parliamentary Group for Space. It has been operating within the Polish Parliament continuously since Parliament's 5<sup>th</sup> Term (2005–2007). This group was created as a response to “the demand of the science and industry sectors” requesting the establishment of such a type of informal body within Parliament<sup>10</sup>. The activities of the Group led to initiation and acceleration of parliamentary works related to development and institutionalisation of the space sector. The activities of the Group contributed among others to: ratification by the government of the ESA association agreement, support for the legislation related to obtaining full membership in ESA by Poland, submission of the parliamentary draft act on the POLSA, inclusion of Polish Parliament in the European Interparliamentary Space Conference (EISC) (Zientarski, 2019, 56–57). Before the creation of the POLSA, the aforementioned PARP was an important element of the institutionalisation of the Polish space sector. One of its organisational units was tasked with “implementing the tasks resulting from the state's policy” towards the space sector. In practice, however, it was about typical PARP promotional activities focused on the space industry. These were – as postulated in the Action Program – temporary tasks, because in the long term it was anticipated that its competences would be taken over by an “independent government agency” reporting directly to the prime minister (Program działań, p. 27, 36; Zarządzenie nr 102, 2012, p. 1). In addition, PARP disseminated information on orders, tenders and competitions announced by ESA. It also acted as a contact point for domestic and foreign business entities interested in implementing Polish space-sector related projects (PARP supports the space sector). The aforementioned process of taking over competences by an “independent government agency”, i.e. PSA, was not started until 2017 (Ziemnicki, 2017). This may indicate that PSA finds it difficult to expand its scope of activity.

Similar significance as in PARP's case cannot be attributed to the Industrial Development Agency (ARP), which has never been entrusted with the role of a substitute of a separate space agency. Based on available documents, its role is not very transparent and as such it appears already after the creation of the PSA. Its tasks can be described as very supportive in respect to the PSA and the Ministry of Development (Polska Strategia Kosmiczna, p. 46, Krajowy Program Kosmiczny, 2018, p. 23). ARP plays an important role in

10 The informal nature of the Group is visible in scarce minutes focusing on the organisational issues of the discussed entity. Information obtained from the Sejm Office indicates that “the Parliamentary Group for Space holds meetings of informative nature and participates in study tours, conferences and major events associated with the space sector”. The Group does not however hold regular meetings directly related to the creation of the legislative process. Answer of the Social Communication Office of Sejm Office dated 09.12.2019 to author's request dated 18.11.2019 regarding the access to public information.

the incubation of space sector staff, among others, through internship programs in Polish companies (Staż, 2019). Nevertheless, its involvement as a separate entity, a state-owned company, subordinated not to the finance minister, but to the KPRP does not strengthen the role of the Ministry of Development and the PSA itself.

An important role, also visible in the documents, is played by “executive agencies” subordinate to the Ministry of Science and Higher Education and dedicated to carry out tasks in the field of implementing or supporting the state's scientific policy. They are the two main grant providers in Poland, i.e. the National Centre for Science (NCN) and the National Centre for Research and Development (NCBiR). In the case of the space sector, including in particular the space industry, NCBiR plays a particularly important role. NCBiR implements strategic programs aimed at creating and implementing technologies applicable in the space sector, in particular INFOSTRATEG (information, telecommunications and mechatronic technologies) and TECHMASTRATEG (material technologies) (O polskim, 2017). A significant achievement of the space industry concerned the creation of the “Fast Path” program in the summer of 2019 addressed exclusively to companies and research institutes planning to implement research and development projects. PLN 300 million has been allocated to the implementation of this program (Fast Track, 2019). The smaller importance of the National Science Centre results not only from the smaller budget of this institution but above all from the fact that as an executive agency it finances basic research, and thus experimental and theoretical research that does not have direct commercial application (Krajowy Program Kosmiczny, 2018, p. 22).

I have included a number of non-governmental organisations supporting the development of this industry in the elements of the institutional environment of the core of the space sector. The Space Sector Employers Association (ZPSK) clearly stands out among these. It was established in October 2012, i.e. on the eve of Poland's ESA membership. ZPSK is an association of over 60 companies, enterprises and research institutes operating in the space industry. The association represents their interests in key political and economic issues relevant to the development of the space sector. The goal is to strengthen this industry and enable it to compete on the European market (O Związku, 2020, Sięgając gwiazd, p. 5). ZPSK plays an important role in respect to documents issued by ministries and executive agencies responsible for the space sector (Krajowy Plan, p. 17, 58, 59). ZPSK is one of the main social partners together with the Space and Satellite Research Committee of the Polish Academy of Sciences. Its operation supplements the initiatives undertaken by the state administration (Polska Strategia Kosmiczna, 2017, p. 46). Elsewhere, its roles are indicated as an information exchange platform, opinion maker and industry integrator. Given the superficiality of Polish law on lobbying, ZPSK also de facto acts as a lobbying organization acting in the interest of space industry businesses.

A separate and crowded category in the institutional environment of the core sector is its base – the main stakeholders of the space sector, i.e. commercial companies, research centres, technical universities, as well as non-governmental organisations. Due to their large number, I will refrain from listing them and refer the readers to more detailed industry publications (Polski sektor kosmiczny, 2018). Returning to the matter at hand, the institutionalisation of the space sector in Poland has clearly accelerated during the analysed period. New decision-making and support entities emerged, and their immediate environs are expanding as well. The increased autonomisation of the space sector has been accelerated, but the path to its further development is blocked by the lack of a single

strong decision-making entity and various financial barriers regarding the decision-makers. In addition, the distribution of responsibility for the sector among several departments with occasionally incompatible interests present even before ESA membership, is still observed.

### Establishment and evolution of the POLSA

The POLSA, established in autumn 2014, requires separate analysis<sup>11</sup>. Formally, it began its operations from the beginning of 2015, as one of several government executive agencies<sup>12</sup>. It was an especially important step towards greater integrity of Poland's space sector. The main reason for its creation on the part of the government was the need to increase the effectiveness of Poland's space policy "both internationally (including in particular within ESA and the EU) and nationally." This required in turn efficient coordination of all undertaken actions. The representatives of the Council of Ministers assumed that the new structure would ensure quick flow of information and better management of the service of individual ESA programs in which Polish businesses and scientific entities participate (Stanowisko Rządu, 2017). In the parliamentary debate of April 23, 2014 regarding the first reading of the MP's draft act on the PSA, however, the need for "more effective coordination of public institutions" was emphasized in comparison to the activities of the then Ministry of Economy. (Pawlak, 2014a). It can be assumed, therefore, that the legislator's intention was to make space policy independent from interministerial disputes, which was to be facilitated by direct subordination of the PSA to the prime minister. The creation of PSA was also intended to be an antidote to the dispersion of powers regarding Poland's space activity among various ministries and other entities.

The PSA Act, as described in its wording of 26 September 2014 subordinated the president of the agency directly to the prime minister (Ustawa z dnia 26 września 2014, art. 2). It imposed duties for the agency to undertake in the field of research and development of space technology, including satellite engineering, as well as the obligation to act for the benefit of the Polish economy, defence arrangements, state-security and science (Article 3, paragraph 1). The agency's tasks defined in the act included, among others, "ensuring coherence of Polish space policy implemented under national and international programs", as well as representing the "Polish economic and scientific interest in the field of research and use of space" on the international stage. In this context, the legislator referred to Poland's participation in the European Union, ESA, EUMETSAT and EDA<sup>13</sup> programs (Article 3, paragraph 2, points 2 and 3). The PSA was also to carry out economic and technical analysis of international projects prepared by Polish entities (Article 3, paragraph 2, item 6). According to the authors of the study on space management, the PSA's specific tasks set out in the Act suggest that it "will play an important coordination role" (Lewandowski, Dudzik, Ingersleben, 2017, 83).

In the amended version of the PSA Act of June 13, 2019 (Ustawa z dnia 13 czerwca 2019), these tasks were repealed. Thus, the role and significance of the PSA was narrowed down by limiting it to auxiliary tasks for the finance minister and the Ministry of Development

11 It happened pursuant to the Act dated 26 September 2014.

12 In the light of the *Act on Public Finances* dated 10 May 2019, as a unit of public finances sector it fulfils the role of "carrying out state tasks" (art. 18), i.e. *de facto* it performs auxiliary functions.

13 European Defence Agency.

currently under his responsibility, as well as other ministries whose representatives sit on the agency's board. The agency president himself was directly subordinated to the head of the ministry. On the other hand, two specific tasks in the field of defence and security “specified by the Minister of National Defence” were added to the Act and implemented after consultation with the Minister of Entrepreneurship and Technology in the form of “analysis of threats in space” and “missile technologies” (Article 3, paragraph 2, item 16 d, e). The amended act clearly strengthened the expert's functions of the agency. It extended the list of international organizations in which Poland's participation required the PSA to appoint advisors and experts in such bodies. At the same time, however, it made access to such assistance regarding personnel matters conditional on the application of individual ministries (Article 3, paragraph 2, points 8, 11). Using the journalistic term, the PSA “played the role of an expert base of state institutions” (Parlamentarny finisz, 2019). Therefore, the PSA's position has been clearly weakened and is now strongly dependent on other entities participating in the creation of Polish space policy.

Almost from the very beginning, considerable controversy emerged around the PSA headquarters, which was also clear during the parliamentary debate, despite the expressed understanding of the “idea of state decentralisation” (Pawlak 2014 b). As a result of the Senate amendment by senator Edmund Wittbrodt – former rector of the Gdańsk University of Technology and the minister of national education in the government of Jerzy Buzek, the headquarters was located in Gdansk. This proposal was justified by the desire to continue the process of state decentralisation and preparation of the scientific community in the Tri-City (Potocka, 2014). The decision was met with understandable friendly reception from universities and business entities from the coast, however, it raised many reservations among representatives of other regions.<sup>14</sup>

The issue of the location of the PSA headquarters once again came to light during the process of amending the aforementioned Act. In 2017, the government's draft amendment proposed to move it to Warsaw, which was justified by the “necessity of permanent agency cooperation with ministries and central offices”, the need to maintain international contacts, as well as the fact that most companies and space sector institutions in Poland are located in the Mazowieckie voivodship (Uzasadnienie zmian, p. 1). On the other hand, supporters of maintaining the PSA headquarters in Gdańsk argued that many economic entities belonging to the space sector were created in Pomerania within a few years. The so-called Tri-City area, (the agglomeration consisting of Gdańsk, Gdynia and Sopot) possesses the only intercollegiate studies in space and satellite engineering in Poland (Kanawka 2018; PO MPs, 2018; Specht 2019, p. 6). Ultimately, the government (namely Minister Jadwiga Emilewicz) withdrew its intention to move its headquarters to Warsaw (Emilewicz, 2018), although an argument was raised during the interministerial consultations that the change of the agency's headquarters would only be an acknowledgement of the facts: 65 percent of the full-time positions in the agency are in Warsaw anyway (Protokół rozbieżności, p. 2). Party considerations were most likely a factor, i.e. the arguments of Law and Justice MPs and councillors from Gdańsk (Emilewicz: siedziba, 2019). Another reason could have been the slogan of deglomeration proclaimed by Porozumienie,

14 The author draws this conclusion based on many discussions held during a number of sector conferences during the years 2015–2017. The majority of his interlocutors was convinced that the location of PSA headquarters outside Warsaw as the administration centre of the country, only hindered the operation of the agency and handling of any formal issues.

Jarosław Gowin's party, i.e. Emilewicz's parent political group. This grouping is part of the United Right holding the balance of power in Poland. Deglomeration in this context, however, referred not so much to the dispersion of population and industry as to central offices (Jaźwiński, 2018)<sup>15</sup>. It should be mentioned that considerable controversy also arose at least twice in regard to the position of the president of the PSA, but this is an issue that goes beyond the scope of the subject of this paper (Spór, 2019).

To sum up, the evolution of the POLSA is going towards weakening its role and subordination to the finance minister. In the amended version of the PSA Act, the statutory changes led to the transition from coordination functions to the expert support for individual ministries. For these reasons – contrary to expectations – it is unlikely to become the much-anticipated entity organising the 'relations of Polish space activities' (Kotarski, 2010, p. 194), as all major decisions will be made between ministries or at the prime ministerial level. Unlike individual ministries, the agency has limited possibilities to decide on finances allocated to space activities. Dreams of a strong Polish equivalent to NASA differ more and more from hard reality.

## Conclusions

Poland's membership in ESA has undoubtedly contributed to the faster development of the space sector in Poland. Before 2012, Polish associations with ESA were limited to flagship research and development institutions, such as CBK PAN. The development of the entire sector accelerated in 2012, especially its commercial part in the form of the space industry. These processes are accompanied by the progressing institutionalisation and professionalisation of the space sector. However, it did not lead to a transparent division of competences or their concentration in one department: indeed, competence disputes became apparent during the MZPK proceedings. They do not serve to strengthen the position of the space sector, neither does the evolution of the PSA position. The statutory changes led to the degradation of the significance of the POLSA and its transition from the position of a space policy integrator to the expert support for individual departments. Undoubtedly, therefore, there is no strong entity capable of effective coordination and promotion of Polish space policy in the country and abroad.

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15 A similar opinion on the seat of the PSA and a change of the location of central agencies in Poland seems to be shared by former President of the Polish Space Agency, Grzegorz Brona, PhD., during a conversation with the author on 5.10.2019.

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