

6. Description of the Current DWIH Network

The DWIH network currently comprises six offices in locations around the world. The DWIH operate in Brazil (São Paulo), India (New Delhi), Japan (Tokyo), Russia (Moscow) and the USA (New York) (see also chapter 3). Most recently, an additional office has been opened on the West Coast of the USA in San Francisco (DAAD, 2020). In essence, the core objectives of the DWIH are to *“increase the visibility of German innovation leaders around the world [...] raise awareness of the German science, research and innovation landscape, advise scientists in Germany and the host countries, and connect actors at the local level”* (DWIH-Netzwerk, 2019). This quote highlights two central themes: visibility and cooperation. The network is designed in such a way that it relies on several key actors (see section 6.1) who are involved in its governance to varying degrees (see section 6.2). This reflects the DWIH’s characterisation as a representational SIC. The DWIH largely operate outside the German diplomatic umbrella (see section 3.3.2) and generally have their own premises. The DWIH New York, for instance, is located in the United Nations office alongside other German actors. Similarly, the DWIH Moscow has shared offices. However, not all locations share a common site which gathers all (German) stakeholders under one roof (i.e., DWIH Tokyo). The exact constellations seem to be dependent on the on-site framework conditions, such as the availability of suitable premises (interview DWIH3). Furthermore, financial considerations may also play a part (interview GIW10). On a general note, the DWIH are deeply rooted in their respective contexts abroad. The focal topics also differ slightly at each DWIH and reflect the local context. However, their work is also guided by common annual DWIH themes. Accordingly, the DWIH conduct activities which are relevant to their national and host country environments (interview DWIH1) with the help of their local ecosystem of supporters¹⁰⁴.

104 Recent insights suggest that the total network of supporting actors across all locations comprises 100 different actors, cf. DAAD (2022).

6.1. Principal Actors

The DWIH network brings together three distinct actor groups which are all involved in its main governance structures. The DWIH maintains close ties to key actors from the political sphere, such as ministries, key actors from the research and science landscape, and actors representing the innovation sphere. The actors that represent the research and science landscape play different roles in the ecosystem and they also vary in terms of their characteristics, such as their size, age, budget, centrality to politics and, importantly, regarding their international outreach and institutional presence abroad. Overall, these key actors reflect the diversity of the German research and science landscape. As of today, there are in total 15 principal actors that are central to the DWIH network and have an ongoing governing function. Three ministries are among the key political actors, whereby the DWIH are under the financial and administrative auspices of the *Auswärtiges Amt*:

- *Auswärtiges Amt (AA)*
- *Bundesministerium für Bildung und Forschung (BMBF)*
- *Bundesministerium für Wirtschaft und Energie (BMWi)*

The research and science landscape is represented by the key stakeholder *Alliance of Science Organisations in Germany*¹⁰⁵ (short: Alliance) with its 10 member organisations. On a contextual note, it should be mentioned that the German research and science ecosystem is characterised by the strong independence of its key organisations (interviews GIW3, GIW13) and by a “*dominance of institutional interests*” (Edler et al., 2010, p. 175, cf. Simon & Knie, 2010). This is reflected in their decision-making autonomy,

105 The *Allianz der Wissenschaftsorganisationen* is the association of the key research organisations in Germany. Its chairmanship rotates annually among its members. On a non-regular basis, the *Allianz* issues common position papers and voices its point of view on pressing issues and developments affecting the research and science sector. See https://www.dfg.de/en/dfg_profile/alliance/index.html (accessed 26.06.2020). By definition, the members of the *Allianz* have different functions and roles in the science and research ecosystem. Hence, they also have different points of departure. In addition, they differ concerning aspects such as closeness/centrality to policy-making, budget, age, etc. This gives them distinct positions within the system. To give examples of their distinct roles, the AvH and the DAAD both act as intermediary organisations to the AA, while the DFG is the research funding organisation; the FhG, HGF, LG and MPG are four non-university research institutions.

independent (political) agendas and the vested interests they bring to the table (Stucke, 2010):

- *Alexander von Humboldt Stiftung* (AvH),
- *Deutscher Akademischer Austauschdienst* (DAAD) — German Academic Exchange Service
- *Deutsche Forschungsgemeinschaft* (DFG) — German Research Foundation
- *Fraunhofer Gesellschaft* (FhG) — Fraunhofer Association
- *Hochschulrektorenkonferenz* (HRK) — German Rectors' Conference
- *Helmholtz-Gemeinschaft* (HGF) — Helmholtz Association of German Research Centres
- *Leibniz Gemeinschaft* (LG) — Leibniz Association
- *Nationale Akademie der Wissenschaften Leopoldina* — German National Academy of Sciences Leopoldina¹⁰⁶,
- *Max-Planck- Gesellschaft* (MPG) — Max Planck Society
- *Wissenschaftsrat* (WR) — German Council of Science and Humanities.

Furthermore, and this accounts for the DWIH's focus on innovation, there are two additional key actors:

- *Bundesverband der deutschen Industrie e.V.* (BDI) — The Federation of German Industries
- *Deutscher Industrie- und Handelskammertag* (DIHK¹⁰⁷) — Association of German Chambers of Industry and Commerce.

Together, these 15 organisations constitute the key actors that are involved in the overall, central governance of the DWIH network (as will be shown in the next chapter). Nevertheless, two actors can be singled out as playing a pivotal role in the spectrum: the AA and the DAAD. The AA is the ministry responsible for the network and it also provides the institutional funding base. Since 2017, the DAAD has been in charge of the daily coordination and management of the network. At the same time, it also provides the institutional and legal infrastructure for the DWIH to operate abroad.

106 On a contextual note, the data suggests that the Leopoldina joined the *Allianz* only at a later stage when it was announced that it would also become a national academy. However, it is unclear when exactly the Leopoldina became a member.

107 For an overview of the development of the AHKs and their embeddedness in overall German foreign policy, see Schultes (2011) and Jäger, Höse, and Oppermann (2011).

Thereby, the DAAD serves as an intermediary organisation to the AA¹⁰⁸ and is at times even considered to be a quasi-policy-maker in its own right (cf. Fromm & Raev, 2018, p. 286). This is due to the fact that it possesses great agenda-setting power as an intermediary organisation and works closely with key ministerial actors. This arrangement is not new per se, since the AA historically relies on intermediary organisations when it comes to the management of its programmes (Harnischfeger, 2007; Maaß, 2015)¹⁰⁹. Although the DAAD is responsible for the network's day-to-day management, the remaining principal actors are equally involved in the governance of the DWIHs, as will be shown below. This governance by multiple actors is deeply rooted in the DNA of the DWIH and constitutes a design principle, as well as a recurrent theme throughout the institutionalisation of the DWIH (Epping, 2020). Accordingly, the DWIH are considered to reflect the representational model.

6.2. Hybrid and Nested Governance Structure

The DWIH network is embedded in a nested governance structure that reflects and accommodates strong actor involvement¹¹⁰. Firstly, there is a central governance structure in Germany (headquarters) that steers and oversees the overall network. Secondly, each location has an additional layer of governance on-site with governing bodies that are composed of actors responsive to the respective context¹¹¹ where the network node is located. Despite these tight governance arrangements, the DWIH are conceived as an instrument that merges individual interests working towards a larger goal while retaining individual visibility (interviews DWIH1, DWIH2). In other words, it is often assumed that the DWIH are greater than the sum of

108 As has been previously mentioned, the Alexander von Humboldt Foundation also acts as an intermediary organisation to the AA.

109 The involvement of agencies and intermediary organisations is reflective of a general development in Germany in recent years. Ministries increasingly rely on agencies to conduct their daily work; Bach and Jann (2010) refer to this as an “*administrative zoo*”.

110 The information that is presented in this section is based on three different sources: a) interview data, b) internet research and c) procedural orders that were made available to the researcher (as amended in 2018).

111 In 2017, a reorganisation took place which created common on-site governance structures. Prior to this, there was a considerable degree of variety regarding these on-site structures, such as advisory boards.

its individual parts due, for instance, to synergy effects that are created in terms of visibility and outreach (interviews DWIH2, GIW8). This suggests an additional value of the DWIH.

6.2.1. Central Governance

The DWIH's central governance is composed of two tiers: a) the high-level board of trustees (*Kuratorium*) and b) the programme committee (see Table 10). The board of trustees is the central governance body and determines the strategic direction of the network. One of the board's core tasks is also making the final decision on the key (annual) theme that is to guide all DWIH activities. The board of trustees involves high-level representation from the 15 principal actors: from the political sphere, the presidents from the Alliance of Science Organisations and actors operating in the innovation realm¹¹². In addition, two seats are reserved for representatives from research companies. The board of trustees is chaired by the AA and co-chaired by the president of the Alliance of Science Organisations (a position which rotates among its members). This set-up has been subject to discussions in the past (see section 7.3.2). The board of trustees is supported by a programme committee that serves as the hands-on link between the strategic board of trustees and the DWIH locations. It is hence in charge of implementing strategic goals and putting them into practice, while also mediating between the two levels. The programme committee is comprised of the working level of all principal actors, in addition to the directors of the local DWIH and the chair of the local advisory body for each DWIH (a position which rotates biannually). The chair of the local advisory body may be a different actor to the ones described above (this is explained below).

112 For more information, see: <https://www.dwih-netzwerk.de/de/ueber-uns/kuratoriumsmitsglieder/> (accessed 26.06.2020).

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Table 10 Organisational Structure: DWIH Network

	Governance Body	Role	Composition
Central Governance	Board of trustees (Kuratorium)	* Central governance body * Sets out strategic direction and controls the network * Agrees for instance on a common annual theme	* AA, sectoral ministries, presidents of the alliance of science organisations, scientists, business representations, representatives from research companies * Chaired by the AA, co-chaired by president of alliance of science organisations
	Programme committee (Programmkomitee)	* Working level to board of trustees * Hands-on link between the strategic board of trustees and the DWIH locations	* Working level representatives of the board of trustees, DWIH directors, chairs of local advisory boards
	Auswärtiges Amt	* Finances and administers DWIH network	* Auswärtiges Amt - Division 604
	DAAD staff section	* Day-to-day management; legal umbrella, responsibility, and coordination	
On-Site Governance	Executive Director, programme manager, local support team	* Daily management of the DWIH on-site	* DAAD branch office holder
	Local Advisory Board	* Advises and consults the work of the DWIH on site	* Constituted by actors that have an institutional presence abroad as well (supporters) and those planning to (associated supporters) * Regional German diplomatic representatives * Chaired by a president

Source: created by the author and based on interview data, internet research¹¹³ and procedural rules.

6.2.2. On-Site Governance

At each DWIH location, the network is run by an executive director, who is also in charge of the DAAD branch office. This was established following a major reorganisation in 2017, when the DAAD became more greatly involved in the governance process. Since then, the DAAD has provided the institutional and legal infrastructure for the DWIH and also borne financial

¹¹³ More information is available on the official DWIH's webpage: <https://www.dwih-netzwerk.de/en/who-we-are/organisation/> (accessed 30.07.2021).

responsibility for it (interview DIWH1). Prior to this, the leadership of the DWIH was in the hands of consortia made up of the key stakeholders (see Table 11, p. 123). Given this evolving (and accountable) role, it seemed justified that the DAAD took a more significant role in the management of the network in 2017 (interviews GIW2, GIW8, GIW13). Notably, this has continuously been under discussion throughout the development of the DWIH (interviews GIW5, GIW9, GIW15). Accordingly, a duality in institutional affiliation can be observed since the executive director represents the DAAD and the DWIH. While this may often create a synergy effect, these two institutional roles are also viewed critically by some actors. This is due to the balancing act of institutional interests and a (potential) lack of detachment from the institutional context. At times, this could raise the question of which affiliation takes precedence¹¹⁴. In other words, this duality is viewed critically in cases when the two institutional affiliations are in conflict and if one affiliation is more dominant than the other (interviews GIW8, GIW10). In the interviews, it became clear that visibility is a key aspect: Who is invited to an event? Which affiliation should take precedence—the DAAD or the DWIH? Or even, does the DAAD want to be invited as representing only the DWIH and not the DAAD? The interview data suggests that, ideally, there should be no conflict of interests; however, at the same time the subordination of the DAAD in favour of the DWIH is not anticipated. While these issues now involve the DAAD, they are not linked to the DAAD as such. These types of questions would presumably similarly arise if another institution (from the circle of principal actors) were responsible for the management of the DWIH.

Hence, this points to issues regarding the design principles (and these could possibly be overcome by installing an independent key representative, although this has so far been opposed). The executive director is supported by a programme manager and a local support team, although the team size varies according to the location. In line with the broad thematic scope, activities and events are organised on-site in a relatively independent way (interviews DWIH1). In addition, each location has a formalised advi-

114 The data reflects that there is an awareness of this dual institutional affiliation and a good role understanding of DWIH and DAAD interests. In potentially sensitive situations, it was revealed that the DAAD takes a neutral stance (interview DWIH3), while generally few critical situations have been encountered (interviews DWIH1, DWIH2, DWIH3). Moreover, reference is made to structural checks and balances arrangements, which aim to monitor any perceived imbalances, such as the local advisory boards chaired by a non-DWIH/DAAD representative.

sory body, which oversees and advises on the work carried out by each office. The local advisory body consists of those national actors that have a presence abroad, also known as supporters. In addition, stakeholders who are not represented at that location can become associated supporters and can participate in the advisory body with voting powers. Furthermore, the German diplomatic representation body in the particular region is also involved¹¹⁵. The advisory body is chaired by a president from that group, who operates in close consultation with the DWIH management, sometimes even taking a representative role (interview DWIH1). Furthermore, due to this role, the chair of the advisory body is also formally involved in the central governance bodies (see section 6.2.1). These governance bodies are formalised, both at the central level and at the individual level on-site, with procedural rules specifying the composition, voting modalities and ways of operating (this new centralised structure is, however, contested and has been challenged on the grounds that it adheres to bureaucratic rather than a science-driven logic (interview GIW2)). To sum up, the DWIH are characterised by an actor-centred governance structure that is deeply rooted in their early years and foundational phase (Epping, 2020). The current structure resulted from a) bargaining processes among the stakeholders and b) an external evaluation which reflected on the work of the DWIH. In response to this evaluation, the DWIH's image and governance has become more streamlined, as will be shown later on (see section 7.3.2).

6.3. Funding

Since 2017, the DWIH network has been institutionally financed by the AA. The costs of personnel and certain types of activities are covered by institutional support from the AA, through the DAAD. In 2021, the total financial support provided to the DWIH locations (five, at that time)

115 This could be seen as involvement by the AA; however, the data suggests that on-site, these representatives do not fulfil a controlling and steering function (interviews DWIH1, GIS5). On the contrary, like all other members of the advisory body, they are in a position to make proposals for the work of the DWIH, such as for particular topics or events. This constellation nevertheless reflects the DWIH's nested governance structure.

amounted to approximately 1.5 million euros¹¹⁶ (source: personal communication 21.04.2022). This suggests that funding was reduced since data from earlier years (i.e., 2017) refers to the sum of 2.5 million euros. Prior to 2017, the network was funded on a project-basis, which meant that public money was allocated on an annual basis and the consortia had to apply for funding again each year. What is more, the data suggests that the DWIH can, in practice, provide limited amounts of funding for events which are organised by its supporters on-site. However, the exact amount differs strongly between the locations, and, in fact, it is reported that this financial support is seldom applied for¹¹⁷.

6.4. Political Embeddedness

Politically, the DWIH are situated in a governance architecture involving two main ministries: AA and BMBF. The DWIH are considered to be a hallmark in the AA's science diplomacy strategy, which was newly launched in 2020¹¹⁸ (Auswärtiges Amt, 2020c) and was part of foreign culture and education policy (*Auswärtige Kultur- und Bildungspolitik*, AKBP)¹¹⁹. Germany's AKBP can be classified alongside three main fields: culture and language, education and science/research, and communication and media. These three fields overall aim to create a pre-political room for dialogue and discourse, empower civil society and a free media as well as the creation of trust (cf. Anheier, 2017, p. 4), and facilitate a dialogue on values, i.e.,

116 To position this in terms of the overall public expenditure on research and innovation activities, please see the BMBF (2020b) and more specifically, see Anheier (2017).

117 This was confirmed through personal communication (12.05.2022). What is more, a trend is witnessed for joint events which are designed and conceptualised between supporters and the DWIH.

118 Prior to that, the DWIH were a key element of research and academic relations policy, which is the translation of *Außenwissenschaftspolitik* (AWP). In 2020, these activities were newly integrated into the science diplomacy strategy (cf. Auswärtiges Amt (2020c)). The science diplomacy strategy combines old instruments of the AWP and puts forward new ones (for more information, see section 8.1.4).

119 A budget of 2.1 billion euros was allocated for AKBP by the Federal Ministry of Finances (2020). Although this amount is shared between different ministries, the largest part resides with the AA (Auswärtiges Amt (2021)). The DWIH are not listed as a separate position since they are part of the DAAD's budget. According to Anheier (2017, p. 4), this sum is comparable to the budget of the USA for public diplomacy (see also interview GIS4).

“Wertedialog” (Maaß, 2013, p. 9). Each field draws on distinct instruments to supplement these topics with the help of intermediary organisations that operate on behalf of the government (Maaß, 2015). The DWIH belong to this education and research field. Simultaneously, the DWIH are anchored as an instrument in the internationalisation strategy that is accounted for by the BMBF for the whole government (BMBF, 2017a).

There are several other instruments that operate in the same realm¹²⁰, which include instruments to strengthen international cooperation, as well as instruments that are intended as branding exercises, such as “Germany – Land of ideas” or “GATE-Germany” (BMBF, 2017a, p. 98). In addition, classical programmes and initiatives that fund international (research) co-operation and mobility must be mentioned (cf. BMBF, 2020b). Compared to other instruments that are in the realm of the BMBF (cf. BMBF, 2020b), the DWIH can be singled out due to their long-term funding and institutional arrangements. These exceed other instruments in the toolbox, such as bilateral cooperation or mobility programmes. In this vein, projects for transnational education (*Transnationale Bildung* (TNB) projects) should also be mentioned (Raev, 2020), as well as other science attachés and their networks (Auswärtiges Amt, 2021, p. 88). Moreover, the DWIH should be understood in relation to other institutional presences abroad which are AA funded, while they should also be distinguished from them. These instruments include the DAAD, the Max-Weber Foundation, the Goethe Institutes (G. Schneider et al., 2000), the German Archaeological Institutes and German schools, to mention a few. However, although these instruments largely operate in the same realm and each constitute distinct institutions, unlike the DWIH, they do not have an umbrella function and are not set up in such a holistic way. In addition, the DWIH brings together a larger number and a wider range of actors. Finally, the political objectives attached to the DWIH are also notable and are subjected to a detailed analysis in the following section (section 8.1).

120 Scholarly literature regards this as a new development; it is seen as a move away from the focus on individual tools in favour of implementing tool mixes or toolkits to tackle specific issues (see section 4.1).