# Relevance of Implementation of Data Access Policies in WIS

The possibility to implement a variety of data policies in WIS is an important element because it allows WIS to address much wider data provider needs and respective user communities compared to the classic GTS system. Hereby it is important to note that all WIS centers support the implementation of data policies consistently across WIS. This paper will discuss some key elements in this respect.

## The difference between access control and data policies

The discussion about Security and Management of data access policies can start with recognising that a data policy is a legal framework in order to protect the interest of a party, typically the data owner, on that data. Those interests can be of a variety of nature such as restricting the audience of such data, regulating the redistribution by others or also financial elements depending of the user profile and usage pattern of the data.

Typically data policies are defined by the data owner in accordance with the needs of the data owner and its respective user community. Hereby the data owner might make use of existing common data policies such as for instance “WMOEssential”, “WMOAdditional”, “WMOOther” or any non WMO data policies which typically suite any data policy implementation. However, depending on the nature of the data and the needs of the data owner a data policy could be more complex and include in their definition for instance distinct user communities and data usage profiles or also timely durations.

Any data policy needs to be communicated and published consistently such that other organisations that might take the role of data distributors/providers on behalf of the data owner can implement and adhere to the defined data policy correctly.

Data access control in comparison is considered as a tool to implement data policy or to obtain information about a data user community independently of a data policy.

## Mechanisms to implement data policies

Depending on the data type there are numerous ways on how to implement a specific data policy. Those methods include user registration and validation, access control and usage restriction that are enforced by technical means.

Such technical means can be applied prior to the user obtaining the data or depending which data delivery mechanisms are chosen also during the actual data transmission for instance via encryption and-or data access keys.

User registration is a key to technically implement a data policy but can also be applied generically including to “free” data in order to obtain useful knowledge on the user community. Such knowledge about the user community bears a number of distinct benefits if user registration is applied across all data policies:

1. It allows the data owner as well as the data provider that might be acting on behalf of a data owner to learn about user communities;
2. It allows to specifically addressing those user communities and to get into a dedicated dialogue with them;
3. It allows the data owner and also potentially the centre acting on behalf of the data owner to overall improve the service provided to the user community.

If user registration is implied on all data obtainable via the WIS then the exchange of user information would need to be managed consistently across at least the GISCs. For such a requirement the appropriate technical implementations would need to be defined including a consistent definition of data policies information as part of the Meta data descriptions. Considering that in future there might be hundreds of DCPCs and data providers there could be in consequence number of individual data policies. Therefore the generic description of the data policy elements in the Meta data needs to be coordinated and agreed on a wider level and the respective Meta data templates need to evolve.

Whilst it is recognized that in future there might be more data policy categories it is felt that currently the “WMOOther” data policy category allows sufficient room for implementation of any bilateral or specific data policy in a generic sense if this key word is applied in an abstract sense and implemented consistently across WIS.

## Relevance of distribution info in the Meta data

The distribution info in the Meta data record could be seen as additional information to the data policy field. If a user discovers a product with “WMOOther” and would normally be re-directed to the data owner who then supplies the data directly to the user such additional information in the area of data distribution could make visible to the user where to obtain this data set alternatively in case the data owner has distinct bilateral agreements that include redistributions with other organisations in place. In a way such bilateral data re-distribution agreements would be made visible to the end-user which is very useful information for them. Furthermore this would allow data providers who have setup a network of re-distributors and by that make the data more widely available in a cost-efficient way to provide this information already during the discovery to the user.

## Conclusion

This short discussion highlights the importance of enhancing the implementation of data policies within WIS. Furthermore this discussion shows how important the coordination of this topic is as it will affect NCs, DCPCs and GISCs alike.

## References

* Manual on WIS

## Recommended Text

ET-WISC agreed that with regards to the relevance of data access policy implementation in WIS it is essential that:

* Data Providers are encouraged to express the data policy of their products consistently and complete;
* Data Providers are encouraged to always indicate the data policy in the Meta data records. If data is considered “free” then this should also be stated e.g. “No limitations”.
* DCPCs and GISCs have technical mechanisms to present data policies (WMO data policies and non WMO data policies, e.g. DCPCs) in the best possible way to users.
* To make use of the distribution info consistently;
* Methods for user registration, access control, authentication and distribution restrictions are the minimum and are not an exclusive list of aspects;
* The current WMO data policy key words are typically sufficient if applied consistently;
* ET-WISC together with IPET-MDRD should set the standards to clearly and consistently express the methods necessary within the Meta data to present data policies to the users. Governance rules and examples could be provided to typical data protection scenario (WMO policies, bilateral Exchange, creative commons, publicly available). If the need is recognized, the WMO\_DataLicenseCode could be expanded and new meaningful keywords created to allow expandability in recognition of the ever-growing number and types of data providers.
* The applicability of the WMO data policy definitions should be clearly defined ore referenced in the Manual on WIS e.g. “Those categories are applicable to WIS data in general”.
* It is recommended to enhance the relevant sections in the Manual on WIS accordingly and to include the aspect of “implementation of data policies” as a mandatory requirement in the WIS centre endorsement process.

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