Data Transfer Impact Assessment (DTIA) on the transfer of Telemetry Data data to the USA

Step 1: Describe the intended transfer

a)	Data exporter (or the sender in case of a relevant onward transfer):	[University X/ Dutch government organisation Y]
b)	Country of data exporter:	Netherlands
c)	Data importer (or the recipient in case of a relevant onward transfer):	Microsoft Corp. USA
d)	Country of data importer:	USA , Microsoft also has data centers in the EU
e)	Context and purpose of the transfer:	Metadata generated through the use of the Microsoft services, through telemetry, service generated server logs, and internal security logs
f)	Categories of data subjects concerned:	Employees/workers and students/pupils with professional Education or Enterprise Microsoft accounts, and external guests with consumer accounts or without accounts invited to join a call hosted by [University X/government organisation Y]
g)	Categories of personal data transferred:	Metadata generated through the use of Teams, OneDrive and SharePoint, through the in-built telemetry clients. Additionally, the IP addresses of individual participants are always necessarily transported in the clear, together with the telemetry events, regardless whether E2EE is used, and can be intercepted in backbone traffic, and distinguished as individuals exchanging IP packets in one-on-one calls. Sometimes the Diagnostic Data also contain Content Data, such as file- and path names when using SharePoint and OneDrive
h)	Sensitive personal data:	Diagnostic Data may reveal social graphs and work/study patterns.
i)	Technical implementation of the transfer:	Telemetry Data are systematically transferred to Microsoft in the USA. Microsoft systematically collects Telemetry Data about the use of its software via an in-built telemetry client. This is software that records all the actions a user performs and regularly sends these data, in batches, to Microsoft's servers in the United States.
j)	Technical and organizational measures in place:	Microsoft minimises the collection of telemetry data, and within the telemetry events, minimises the collection of identifiable data. Telemetry Data are collected in pseudonymised form. As a result of the negotiations with SLM Rijk, Microsoft enables admins to centrally minimise the amount of collected telemetry events. Microsoft publicly guarantees: "*Diagnostic data may contain "personal data" as defined by Article 4 of the European GDPR, but it does not contain your name, your email address, or any content from your files. All diagnostic data Microsoft collects during the use of Office applications and services is pseudonymized, as defined in ISO/IEC 19944-1:2020, section 8.3.3.*" Admins can additionally pseudonymise Account Data (collected in the service generated server logs) by using SSO. There is one exception for OneDrive telemetry events. These may include a user name, mail address and path name of a file, but Microsoft applies extra guarantees, such as separate collection, strict authorisations and a shorter retention period to these events. In the second half of 2021, Microsoft expanded the availability of the Diagnostic Data Viewer (DDV) to the iOS and Android apps for Teams and OneDrive. The functionality of these tools was confirmed in the most recent app versions in January 2022. The DDV is not yet available in the desktop versions of OneDrive (Windows and MacOS).
k)	Relevant onward transfer(s) of personal data (if any):	Besides the systematic transfer to the USA only incidentally, if a customer knowingly provides Telemetry Data in a Support Request to Microsoft - See the tab Support Data TOS. Microsoft employs least privilege access mechanisms to control access to Customer Data and Professional Services Data (including any Personal Data therein). Role-based access controls are employed to ensure that access to Customer Data and Professional Services Data required for service operations is for an appropriate purpose and approved with management oversight. For Core Online Services and Professional Services, Microsoft maintains Access Control mechanisms described in the table entitled "Security Measures" in Appendix A of the DPA. For Core Online Services, there is no standing access by Microsoft personnel to Customer Data and any required access is for a limited time. Microsoft will ensure that Subprocessors are bound by written agreements that require them to provide at least the level of data protection required of Microsoft by the DPA, including the limitations on disclosure of Processed Data. Microsoft agrees to oversee the Subprocessors to ensure that these contractual obligations are met.
l)	Countries of recipients of relevant onward transfer(s):	N/A

Step 2: Define the DTIA parameters

			Rationale
a)	Starting date of the transfer:	[fill in date]	
b)	Assessment period in years:	2	
c)	Ending date of the assessment based on the above:	X+2	
d)	Target jurisdiction for which the DTIA is made:	USA	
e)	Is importer an Electronic Communications Service Provider as defined in USC § 1881(b)(4):	Yes	
f)	Does importer/processor commit to legally resist every request for access :	Yes	
g)	Relevant local laws taken into consideration:	Section 702 FISA, other FISA warrants such as business records, pen registers and trap and trace devices, EOP 12333 (mitigated by PPD-28), National Security Letters (secret services) and US Cloud Act, US Stored Communications Act (SCA),NSLs based on ECPA, administrative and judicially issued subpoenas, and search warrants.	*This DTIA takes the risks of two types of US legislation into account: traditional law enforcement, and court ordered subpoenas and warrants, as well as secret services powers, letters and FISC authorisations. Since Microsoft is an 'Electronic Communications Service Provider', EOP 12333 and FISA Section 702 also apply directly to Microsoft, and not only to backbone providers addressed in Step 4b of this DTIA. Microsoft also qualifies as "remote computing services" or "electronic communication services". This means the US Stored Communications Act and US CLOUD Act als apply. This DTIA does *not* assess the risks of requests for personal data ordered by EU law enforcement authorities through MLAT requests. This DTIA also cannot take the risks into account of the recently disclosed CIA bulk surveillance based on EOP 12333, as it is not known what categories of personal data this surveillance involves.*

Step 3: Probability that a foreign authority has a legal claim in the data and wishes to enforce it against the provider

		Probability per case	Cases per year	Cases remaining	Rationale
a)	Number of cases under the laws listed in Step 2g per year in which an authority in the USA is estimated to attempt to obtain relevant data through legal action during the period under consideration.		0,50		*The number of 0.5 case per year is an estimate based on (1) Microsoft's own transparency reporting and assurance it has not yet **provided** any personal data from EU public sector customers to any government*, (2) historical data available in this sector, and (3) a requirement to calculate based on a number greater than zero. *For clarity, under US law, providers can neither confirm nor deny having **received** any specific legal demands subject to a secrecy obligation.*
b)	Share of such cases in which the request occurs in connection with a case that due to its nature in principle permits the authority to obtain the data also from a provider	100%	0,50		*Telemetry events are encrypted by Microsoft during transport, but are available for Microsoft employees in the clear. Microsoft promises to legally resist every order, pay compensation to its customers when it is compelled to disclose, and Microsoft is a processor, not a data controller for the personal data.*
c)	Probability that in the remaining such cases it will be possible for the company to successfully cause the authority (by legal means or otherwise) to give up its request for the data **in plain text**	100%	0,00		*Telemetry events are encrypted by Microsoft during transport, but are available for Microsoft employees in the clear. Customers cannot apply any encryption to these data. Microsoft promises to legally resist every order, pay compensation to its customers when it is compelled to disclose, and Microsoft is a processor, not a data controller for the personal data.*
d)	Probability that in the remaining cases the requested data will be provided in one way or another (e.g., with consent or through legal or administrative assistance)	25%	0,00		*Consent from an EU Enterprise or EDU Customer is unlikely, in the absence of an adequate treaty with the USA. Since Microsoft is a processor, and not a controller for the personal data in these logs, it will take time for the US authorities to force Microsoft to provide the requested data. Because the telemetry events reveal limited information, the chance that the authorities will want to undergo such trouble is limited to only particularly important cases, thus significantly reducing the number of relevant cases.*
e)	Probability that in the remaining cases the authority will consider the data it is seeking to be so important that it will look for another way to obtain it	10%	0,00	0,00	*It is assumed this question tries to assess the probability that Microsoft is hacked. This cannot be excluded.*
Number of cases per year in which the question of lawful access by a foreign authority arises				0,00	
Number of cases in the period under consideration				0,00	

Step 4a: Probability that a foreign authority will successfully enforce the claim through the provider

Legal Basis considered for the following assessment:	Section 702 FISA, other FISA warrants such as business records, pen registers and trap and trace devices, EOP 12333 (mitigated by PPD-28), National Security Letters (secret services) and US Cloud Act, US Stored Communications Act (SCA), NSLs based on ECPA, administrative and judicially issued subpoenas, and search warrants.

	Prerequisite for success	**Probability per case**			**Rationale**
a)	Probability that the authority is aware of the provider and its subcontractors (prerequisite no. 1)	100%		100%	*Microsoft is a well-known communications provider with a substantial amount of Enterprise and Edu Customers in the EU*
b)	Probability that an employee of the provider or its subcontractors will gain access to the data in plain text in a support-case ... (prerequisite no. 2)	100%	100,00%		*By its nature, Telemetry Data are likely to be accessible by Microsoft engineers and employees performing support.*
	... and is able to search for, find and copy the data requested by the authority (prerequisite no. 3)	100%			*By its nature, Telemetry Data are likely to be accessible by Microsoft engineers and employees performing support.*

c)	Probability that despite the technical countermeasures taken, employees of the provider, of its subcontractors or of the parent company technically have access to data in plain text (also) outside a support situation (e.g., using admin privileges) or are able to gain such access, e.g., by covertly installing a backdoor or "hacking" into the system (irrespective of whether	100%	100,00%	100%	*By its nature, Telemetry Data are likely to be accessible by Microsoft engineers and employees performing support.*
	... and are then able to search for, find and copy the data requested by the authority (prerequisite no. 3)	100%			*By its nature, Telemetry Data are likely to be accessible by Microsoft engineers and employees performing support.*
d)	Probability that the provider, the subcontractor or its parent company, respectively, is located within the jurisdiction of the authority (prerequisite no. 4)	100%		100%	*Microsoft is a US based company*
e)	Probability that despite the technically limited access and the technical and organizational countermeasures in place, the authority is permitted to order the provider, its subcontractor or the parent company, respectively, to obtain access to the data and produce it to the authority in plain text (prerequisite no. 5)	100%		100%	*Speculative estimate, Microsoft lacks historical data on such scenarios and cannot provide a fact based rationale. By its nature, some Telemetry Data are likely to be accessible by Microsoft engineers and employees performing support. Microsoft could theoretically be forced to disclose these data. Since Microsoft is a processor, not a controller, the chance is reduced to 50%.*
f)	Probability that if data were to be handed over to the foreign authority, this would lead to the criminal liability of employees of the provider or its subcontractors, the prosecution of which would be possible and realistic, and as a consequence, the data does not have to be produced or is not produced (prerequisite no. 6)	80%		20%	*As data importer Microsoft Corporation implements strict technical and organisational measures to protect access to the Telemetry Data stored in the USA. These measures are set forth in Microsoft Security Policy and shall comply with the requirements in ISO 27001, ISO 27002, and ISO 27018. Microsoft employs least privilege access mechanisms to control access to Customer Data and Professional Services Data (including any Personal Data therein). Role-based access controls are employed to ensure that access to Customer Data and Professional Services Data required for service operations is for an appropriate purpose and approved with management oversight. For Core Online Services and Professional Services, Microsoft maintains Access Control mechanisms described in the table entitled "Security Measures" in Appendix A of it DPA. For Core Online Services, there is no standing access by Microsoft personnel to Customer Data and any required access is for a limited time. Microsoft would certainly take action if its employees in the USA, or employees of subprocessors, would unduely access the Telemetry Data.*
g)	Probability that the company does not succeed in removing the relevant data in time or otherwise withdrawing it from the provider's access (prerequisite no. 7)	100%		100%	*If Microsoft receives a valid order/warrant or subpoena, Microsoft may be subjected to gagging order and not permitted to inform its Customer. Hence Microsoft may not be in a position to issue a timely warning to its customer that it can no longer comply with the data protection guarantees in the SCC.*
Residual risk of successful lawful access by a foreign authority through the provider (given the countermeasures):				20,00%	
Step 4b: Probability of foreign lawful access by mass surveillance contents					
Legal Basis considered for the following assessment:		Section 702 US Foreign Intelligence Surveillance Act (FISA), Executive Order (EO) 12333			
		Probability in the period			**Rationale**
a)	Probability that the data at issue is transmitted to the provider or its subcontractors in a manner that permits the telecommunications providers in the country to view it in plain text as part of an upstream monitoring of Internet backbones	0%	0,00%	0,00%	*The probability is zero for telemetry data transferred to, and processed by, Microsoft, due to TLS encryption. Only the IP addresses are transported in the clear.*
b)	Probability that the data transmitted will include content picked by selectors (i.e., intelligence search terms such as specific recipients or senders of electronic communications)	0%			*Idem*
c)	Probability that the provider or a subcontractor in the country is technically able to on an ongoing basis search the data in plain text for selectors (i.e. search terms such certain recipients or senders of electronic communications) without the customer's permission as part of a downstream monitoring of online communications	0%	0,00%		*Idem*
d)	Probability that the provider or a subcontractor in the country above may be legally required to perform such as search (also) with the company's data	0%			*Idem*
e)	Probability that the data is regarded as content that is the subject of intelligence searches in the country as per the above laws	5%			*It is not very likely that Telemetry Data processed by Microsoft by an EU gov or university organisation are considered interesting for intelligence searches, but it cannot be excluded*
Residual risk of successful lawful access by a foreign intelligence service without any guarantee of legal recourse (in view of the countermeasures):				0,00%	
Step 5: Overall assessment					
Probability that the question of lawful access via the cloud provider will arise at all (1 case in the period = 100%)				0,00%	
Probability of successful lawful access by the foreign authorities concerned in these cases despite the countermeasures				20,00%	
Probability of additional successful lawful access by a foreign intelligence service where there is no guarantee of legal recourse (despite countermeasures)				0,00%	
Overall probability of a successful lawful access to data in plain text via the cloud provider in the observation period:				0,00%	
Description in words (based on Hillson*):			Very low		
The number of years it takes for a lawful access to occur at least once with a **90 percent** probability:				∞	
The number of years it takes for a lawful access to occur at least once with a **50 percent** probability:				∞	
... assuming that the probability neither increases nor decreases over time (like tossing a coin)					
** Scale: <5% = "Very low", 5-10% = "Low", 11-25 = "Medium", 26-50% = "High" and >50% = "Very high" (by David Hillson, 2005, see https://www.pmi.org/learning/library/describing-probability-limitations-natural-language-7556).*					
Step 6: Data subject risks					
					Rationale
a)	*Estimated probability of occurance of successful lawful access risk:*	*0,00%*	*Very Low*		
b)	*Estimated impact of risk*	*1= pseudonymised diagnostic data*	*Low*		*The Telemetry Data are pseudonymous, and do not include Content Data, except for OneDrive events that may include path names. These OneDrive events are collected via a separate network endpoint and deleted within 30 days.*
	Very High / High / Medium / Low / Very Low × 0 / 1 / 2 / 3 / 4		*Low*		
Step 7: Define the safeguards in place					
					Rationale
a)	Would it be feasible, from a practical, technical and economical point of view, for the data exporter to transfer the personal data in question to a location in a whitelisted country instead?	Yes	*Describe why you still do not pursue this option*		*Microsoft has anounced that the EU data boundary shall be in place for all EU public sector customers by the end of 2022 . However, the EU data localization does not prevent access to these data from the USA, because Microsoft is a US-based company.*
b)	Is the personal data transferred under one of the exemptions pursuant to applicable data protection law (e.g., Art. 49 GDPR in case of the GDPR)?	No			*Telemetry data are pseudonymous, with the exception of OneDrive events. Admins are recommended to use SSO if the Account Data are confidential, and organisations to establish a policy warning employees not to include personal data in file and path names. Additionally, all traffic over the internet is protected by encryption in transit (SSL/TLS)*
c)	Is the personal data at issue transmitted to the target jurisdiction in clear text (i.e. there is no appropriate encryption in-transit)?	No	*Ensure that data remains encrypted*		*All traffic over the internet is protected by encryption in transit (SSL/TLS)*

d)	Is the personal data at issue accessible in the target jurisdiction in clear text by the data importer/recipient or a third party (i.e. the data is either not appropriately encrypted or access to the keys to decrypt is possible)?	Yes	*Foreign lawful access is at least technically possible*		*The Telemetry Data are by nature accessible in the clear for support purposes and for Microsoft engineers that are permitted to work with Telemetry Data. MIcrosoft employees and Microsoft (sub-processors) agents are required to take the provided training on data handling. The (sub-processing list) based agents can only view personal data in Microsofts Core Online Services via highly controlled workspaces. Access to pseudonymous diagnostic data is possible without the permission of the manager but subprocessors do not have acces to keys or lookup lists to attribute pseudonymized data to a specific individual. For Core Online Services, there is no standing access by Microsoft personnel to Customer Data and any required access is for a limited time*
e)	Is the personal data at issue protected by a transfer mechanism approved by the applicable data protection law (e.g., the EU Standard Contractual Clauses in case of the GDPR, approved BCR, or - in the case of an onward transfer - a back-to-back-contract in line with the EU SCC), and can you expect compliance with it, insofar permitted by the target jurisdiction, and judicial enforcement (where applicable)?	Yes	*Ensure that the mechanism remains in place and is complied with*		*SLM Rijk and Microsoft have signed the SCCs which have been in place ever since 2010, and are in the process of updating those to the most recently issued version. Microsoft has updated SCCs in place with all third-party subprocessors in India, China or Serbia mentioned in Microsoft Online Services Subprocessors List.*
Based on the answers given above, the transfer is:		**permitted**			
Final Step: Conclusion					
In view of the above and the applicable data protection laws, the transfer is:		**permitted**			Reassess at the latest by: X+2 (or if there are any changes in circumstances)
This Transfer Impact Assessment has been made by:			Place, Date:		
SLM / PRIVACY COMPANY			**Signed:**		
			By:	[Government org X, University Y]	