The present note summarises relevant excerpts from the COMMISSION REGULATION (EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management (GL CACM).

Only passages relevant for the Methodologies project have been excerpted. If a passage is not included in the following table, then it was considered irrelevant with respect to the CGMM and GLDPM. "(...)" denotes deliberate omissions.

Excerpts	**How were requirements incorporated into Methodologies**
GL CACM; "Whereas"; (4) To implement single day-ahead and intraday coupling, the available cross-border capacity needs to be calculated in a coordinated manner by the Transmission System Operators (hereinafter 'TSOs'). For this purpose, they should establish a common grid model including estimates on generation, load and network status for each hour. (...)	Excerpted for the sake of completeness; no concrete tasks related to the CGMM/GLDPM result from that passage
GL CACM; "Whereas"; (8) A common grid model for single day-ahead and intraday coupling purposes representing the European interconnected system should be established to calculate cross-zonal capacity in a coordinated way. The common grid model should include a model of the transmission system with the location of generation units and loads relevant to calculating cross-zonal capacity. The provision of accurate and timely information by each TSO is essential to the creation of the common grid model.	Excerpted for the sake of completeness; no concrete tasks related to the CGMM/GLDPM result from that passage
GL CACM; "Whereas"; (9) Each TSO should be required to prepare an individual grid model of its system and send it to TSOs responsible for merging them into a common grid model. The individual grid models should include information from generation and load units.	Excerpted for the sake of completeness; no concrete tasks related to the CGMM/GLDPM result from that passage
GL CACM; "Whereas"; (30) Given the exceptionally high degree of complexity and detail of the terms and conditions or methodologies needed to fully apply single day-ahead and intraday coupling, certain detailed terms and conditions or methodologies should be developed by TSOs and NEMOs and approved by the regulatory authorities. However the development of certain terms and conditions or methodologies by TSOs and power exchanges and their subsequent approval by regulatory authorities must not delay the completion of the internal electricity market. Thus, it is necessary to include specific provisions on cooperation between TSOs, NEMOs and regulatory authorities.	Excerpted for the sake of completeness; no concrete tasks related to the CGMM/GLDPM result from that passage
GL CACM; Article 1 (1) [Subject matter and scope] This Regulation lays down detailed guidelines on cross-zonal capacity allocation and congestion management in the day-ahead and intraday markets, including (...)	Since there is little point in developing time frame – specific methodologies, the CGMM and GLDPM, in addition to the GL CACM time frames, also cover the GL FCA and GL SO time frames. This is explained in the section on "Legal requirements".
GL CACM; Article 1 (2) [Subject matter and scope] This Regulation shall apply to all transmission systems and interconnections in the Union except the transmission systems on islands which are not connected with other transmission systems via interconnections.	The exception is explicitly referenced in the section on "Geographical coverage".
GL CACM; Article 1 (3) [Subject matter and scope] In Member States where more than one transmission system operator exists, this Regulation shall apply to all transmission system operators within that Member State. Where a transmission system operator does not have a function relevant to one or more obligations under this Regulation, Member States may provide that the responsibility for complying with those obligations is assigned to one or more different, specific transmission system operators.	These provisions are referred to in the CGMM / GLDPM sections on "Geographical coverage and scope of application"

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 1 (4) and (5) [Subject matter and scope] Articles relating to Switzerland's participation in market coupling (not excerpted)	Legal questions related to these articles are out of scope of the CGMM and GLDPM. This is explicitly stated in the overview of the CGM Area in terms of coverage of bidding zones in the annex. Switzerland is, at any rate, part of the CGM Area.
GL CACM; Article 2 [Definitions]	The "Glossary" section of the CGMM / GLDPM contains a list of definitions. The relevant definitions from GL CACM Article 2 (and only those) were included in that list.
GL CACM; Article 3 [Objectives of capacity allocation and congestion management cooperation] This Regulation aims at: (a) promoting effective competition in the generation, trading and supply of electricity; (b) ensuring optimal use of the transmission infrastructure; (c) ensuring operational security; (d) optimising the calculation and allocation of cross-zonal capacity; (e) ensuring fair and non-discriminatory treatment of TSOs, NEMOs, the Agency, regulatory authorities and market participants; (f) ensuring and enhancing the transparency and reliability of information; (g) contributing to the efficient long-term operation and development of the electricity transmission system and electricity sector in the Union; (h) respecting the need for a fair and orderly market and fair and orderly price formation; (i) creating a level playing field for NEMOs; (j) providing non-discriminatory access to cross-zonal capacity.	As is required by GL CACM Art. 9 (9), the CGMM and the GLDPM each need to contain "a description of their expected impact on the objectives of [the GL CACM]". A corresponding section has been included in both the CGMM and the GLDPM. In that section the (relevant) objectives stated in Article 3 are referred to.
GL CACM; Article 9 [Adoption of terms and conditions or methodologies]	All TSOs closely cooperated in the development of the methodologies and agreed, by way of a formal voting process under this article, to present the draft methodologies to consultation under Article 12. The competent regulatory authorities and the Agency were also regularly informed about the progress of developing the methodologies.
GL CACM; Article 9 (1) [Adoption of terms and conditions or methodologies] TSOs and NEMOs shall develop the terms and conditions or methodologies required by this Regulation and submit them for approval to the competent regulatory authorities within the respective deadlines set out in this Regulation. Where a proposal for terms and conditions or methodologies pursuant to this Regulation needs to be developed and agreed by more than one TSO or NEMO, the participating TSOs and NEMOs shall closely cooperate. TSOs, with the assistance of ENTSO for Electricity, and all NEMOs shall regularly inform the competent regulatory authorities and the Agency about the progress of developing these terms and conditions or methodologies.	Excerpted for the sake of completeness; no concrete tasks related to the CGMM/GLDPM result from that passage that are not already being covered: --the TSOs are on track to meet their deadline and cooperate closely --the competent regulatory authorities and the Agency are being informed about progress via the CACM Implementation Group

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 9 (2) [Adoption of terms and conditions or methodologies] TSOs or NEMOs deciding on proposals for terms and conditions or methodologies in accordance with Article 9(6) shall decide with qualified majority if no consensus could be reached among them. The qualified majority shall be reached within each of the respective voting classes of TSOs and NEMOs. A qualified majority for proposals in accordance with Article 9(6) shall require a majority of: (a) TSOs or NEMOs representing at least 55 % of the Member States; and (b) TSOs or NEMOs representing Member States comprising at least 65 % of the population of the Union. A blocking minority for decisions in accordance with Article 9(6) must include TSOs or NEMOs representing at least four Member States, failing of which the qualified majority shall be deemed attained. For TSO decisions under Article 9(6), one vote shall be attributed per Member State. If there is more than one TSO in the territory of a Member State, the Member State shall allocate the voting powers among the TSOs. (...)	Excerpted for the sake of completeness; no concrete tasks related to the CGMM/GLDPM result from that passage that are not already being covered: --the decision / voting procedure has been agreed among the TSOs and reflects the requirements set out in GL CACM Article 9 (2)
GL CACM; Article 9 (4) [Adoption of terms and conditions or methodologies] If TSOs or NEMOs fail to submit a proposal for terms and conditions or methodologies to the national regulatory authorities within the deadlines defined in this Regulation, they shall provide the competent regulatory authorities and the Agency with the relevant drafts of the terms and conditions or methodologies, and explain what has prevented an agreement. The Agency shall inform the Commission and shall, in cooperation with the competent regulatory authorities, at the Commission's request, investigate the reasons for the failure and inform the Commission thereof. The Commission shall take the appropriate steps to make possible the adoption of the required terms and conditions or methodologies within four months from the receipt of the Agency's information.	Excerpted for the sake of completeness
GL CACM; Article 9 (5) [Adoption of terms and conditions or methodologies] Each regulatory authority shall approve the terms and conditions or methodologies used to calculate or set out the single day-ahead and intraday coupling developed by TSOs and NEMOs. They shall be responsible for approving the terms and conditions or methodologies referred to in paragraphs 6, 7 and 8.	Excerpted for the sake of completeness
GL CACM; Article 9 (6) [Adoption of terms and conditions or methodologies] The proposals for the following terms and conditions or methodologies shall be subject to approval by all regulatory authorities: (...) (c) the generation and load data provision methodology in accordance with Article 16(1); (d) the common grid model methodology in accordance with Article 17(1); (...)	Excerpted for the sake of completeness
GL CACM; Article 9 (9) [Adoption of terms and conditions or methodologies] The proposal for terms and conditions or methodologies shall include a proposed timescale for their implementation and a description of their expected impact on the objectives of this Regulation. Proposals on terms and conditions or methodologies subject to the approval by several or all regulatory authorities shall be submitted to the Agency at the same time that they are submitted to regulatory authorities. Upon request by the competent regulatory authorities, the Agency shall issue an opinion within three months on the proposals for terms and conditions or methodologies.	"Timescale for implementation" chapters were included in both the CGMM and the GLDPM. Both methodologies also include a section on "Objectives of the GL CACM and impact of the [methodology] thereon". Parallel submission to ACER has been recorded as a task to be completed in due course.

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 9 (10) [Adoption of terms and conditions or methodologies] Where the approval of the terms and conditions or methodologies requires a decision by more than one regulatory authority, the competent regulatory authorities shall consult and closely cooperate and coordinate with each other in order reach an agreement. Where applicable, the competent regulatory authorities shall take into account the opinion of the Agency. Regulatory authorities shall take decisions concerning the submitted terms and conditions or methodologies in accordance with paragraphs 6, 7 and 8, within six months following the receipt of the terms and conditions or methodologies by the regulatory authority or, where applicable, by the last regulatory authority concerned.	Excerpted for the sake of completeness only
GL CACM; Article 9 (11) [Adoption of terms and conditions or methodologies] Where the regulatory authorities have not been able to reach agreement within the period referred to in paragraph 10, or upon their joint request, the Agency shall adopt a decision concerning the submitted proposals for terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009.	Excerpted for the sake of completeness only
GL CACM; Article 9 (12) [Adoption of terms and conditions or methodologies] In the event that one or several regulatory authorities request an amendment to approve the terms and conditions or methodologies submitted in accordance with paragraphs 6, 7 and 8, the relevant TSOs or NEMOs shall submit a proposal for amended terms and conditions or methodologies for approval within two months following the requirement from the regulatory authorities. The competent regulatory authorities shall decide on the amended terms and conditions or methodologies within two months following their submission. Where the competent regulatory authorities have not been able to reach an agreement on terms and conditions or methodologies pursuant to paragraphs (6) and (7) within the two-month deadline, or upon their joint request, the Agency shall adopt a decision concerning the amended terms and conditions or methodologies within six months, in accordance with Article 8(1) of Regulation (EC) No 713/2009. If the relevant TSOs or NEMOs fail to submit a proposal for amended terms and conditions or methodologies, the procedure provided for in paragraph 4 of this Article shall apply.	Excerpted for the sake of completeness only
GL CACM; Article 9 (13) [Adoption of terms and conditions or methodologies] TSOs or NEMOs responsible for developing a proposal for terms and conditions or methodologies or regulatory authorities responsible for their adoption in accordance with paragraphs 6, 7 and 8, may request amendments of these terms and conditions or methodologies. The proposals for amendment to the terms and conditions or methodologies shall be submitted to consultation in accordance with the procedure set out in Article 12 and approved in accordance with the procedure set out in this Article.	Excerpted for the sake of completeness
GL CACM; Article 9 (14) [Adoption of terms and conditions or methodologies] TSOs and NEMOs responsible for establishing the terms and conditions or methodologies in accordance with this Regulation shall publish them on the internet after approval by the competent regulatory authorities or, if no such approval is required, after their establishment, except where such information is considered as confidential in accordance with Article 13.	Task has been recorded and will be completed in due course
GL CACM; Article 12 (1) [Consultation] TSOs and NEMOs responsible for submitting proposals for terms and conditions or methodologies or their amendments in accordance with this Regulation shall consult stakeholders, including the relevant authorities of each Member State, on the draft proposals for terms and conditions or methodologies where explicitly set out in this Regulation. The consultation shall last for a period of not less than one month.	Consultation on Methodologies in accordance with the requirements of Article 12 will take place

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 12 (2) [Consultation] The proposals for terms and conditions or methodologies submitted by the TSOs and NEMOs at Union level shall be published and submitted to consultation at Union level. Proposals submitted by the TSOs and NEMOs at regional level shall be submitted to consultation at least at regional level. Parties submitting proposals at bilateral or at multilateral level shall consult at least the Member States concerned.	Excerpted for the sake of completeness; see comment on Article 12 (1)
GL CACM; Article 12 (3) [Consultation] The entities responsible for the proposal for terms and conditions or methodologies shall duly consider the views of stakeholders resulting from the consultations undertaken in accordance with paragraph 1, prior to its submission for regulatory approval if required in accordance with Article 9 or prior to publication in all other cases. In all cases, a clear and robust justification for including or not the views resulting from the consultation shall be developed in the submission and published in a timely manner before or simultaneously with the publication of the proposal for terms and conditions or methodologies.	Excerpted for the sake of completeness; see comment on Article 12 (1)
GL CACM; Article 13 (1) to (4) [Confidentiality obligations] 1. Any confidential information received, exchanged or transmitted pursuant to this Regulation shall be subject to the conditions of professional secrecy laid down in paragraphs 2, 3 and 4. 2. The obligation of professional secrecy shall apply to any person subject to the provisions of this Regulation. 3. Confidential information received by the persons referred to in paragraph 2 in the course of their duties may not be divulged to any other person or authority, without prejudice to cases covered by national law, the other provisions of this Regulation or other relevant Union legislation. 4. Without prejudice to cases covered by national law, regulatory authorities, bodies or persons which receive confidential information pursuant to this Regulation may use it only for the purpose of the performance of their functions under this Regulation.	The requirements set out in GL CACM Article 13 were incorporated into both the CGMM and the GLDPM in a separate section on "confidentiality".
GL CACM; Article 14 (1) [Capacity calculation time-frames] 1. All TSOs shall calculate cross-zonal capacity for at least the following time-frames: (a) day-ahead, for the day-ahead market; (b) intraday, for the intraday market.	GL CACM Article 28 (5) requires a CGM to be created for each scenario described in GL CACM Article 18; Article 18 refers to Article 14 (1) (a) and (b). The day-ahead time frame, for the day-ahead market, and the intraday time frame, for the intraday market, are consistently covered throughout the Methodologies, e.g., in the description of scenarios, timelines / deadlines etc
GL CACM; Article 14 (2) [Capacity calculation time-frames] 2. For the day-ahead market time-frame, individual values for cross-zonal capacity for each day-ahead market time unit shall be calculated. For the intraday market time-frame, individual values for cross-zonal capacity for each remaining intraday market time unit shall be calculated.	The need to create a CGM for each relevant market time unit (such that, for example, for the day-ahead market effectively 24 different CGMs, one for each hour of the day of delivery, have to be prepared) is clearly described in the relevant passages; e.g. in the section on scenarios or in the passage on the pre-processing phase with respect to CGM Alignment in the CGMM or in the chapters relating to non-structural data in the GLDPM.
GL CACM; Article 14 (3) [Capacity calculation time-frames] 3. For the day-ahead market time-frame, the capacity calculation shall be based on the latest available information. The information update for the day-ahead market time-frame shall not start before 15:00 market time two days before the day of delivery.	This requirement has been incorporated both into the CGMM (see chapter on timelines / deadlines) and the GLDPM (chapters on non-structural data).

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 14 (4) [Capacity calculation time-frames] 4. All TSOs in each capacity calculation region shall ensure that cross-zonal capacity is recalculated within the intraday market time-frame based on the latest available information. The frequency of this recalculation shall take into consideration efficiency and operational security.	The need for intraday CGMs in order to recalculate intraday capacities is clearly explained in the CGMM; e.g., in the chapter on timelines/deadlines. It is also referenced in the GLDPM where appropriate.
GL CACM; Article 16 (1) [Generation and load data provision methodology] 1. By 10 months after the entry into force of this Regulation all TSOs shall jointly develop a proposal for a single methodology for the delivery of the generation and load data required to establish the common grid model, which shall be subject to consultation in accordance with Article 12. The proposal shall include a justification based on the objectives of this Regulation for requiring the information.	This article provides the basis for preparing the GLDPM and is clearly cited in the sections on the purpose of the document and on legal requirements. As far as the consultation requirements are concerned, see notes on GL CACM Article 12 above. A justification for requiring the information based on the objectives of GL CACM in Article 3 has been included in the GLDPM as a separate section.
GL CACM; Article 16 (2) [Generation and load data provision methodology] 2. The proposal for the generation and load data provision methodology shall specify which generation units and loads are required to provide information to their respective TSOs for the purposes of capacity calculation.	The GLDPM contains a separate section listing the various groups of generation units and loads required to provide data and it also explains, for each data item, which generation units and loads need to provide these data.
GL CACM; Article 16 (3) [Generation and load data provision methodology] 3. The proposal for a generation and load data provision methodology shall specify the information to be provided by generation units and loads to TSOs. The information shall at least include the following: (a) information related to their technical characteristics; (b) information related to the availability of generation units and loads; (c) information related to the schedules of generation units; (d) relevant available information relating to how generation units will be dispatched.	The "(a) information related to (...) technical characteristics" is requested in the GLDPM sub-sections on structural data; the "(b) information related to the availability of generation units and loads" is requested in the GLDPM sub-sections on variable data (3.3.2 – power generating modules; 3.4.2 – interconnectors; 3.5.2 – demand faciilities); the "(c) information related to the schedules of generation units" is requested in GLDPM sub-section 3.3.2; the "(d) relevant available information relating to how generation units will be dispatched" is requested in GLDPM sub-section 3.3.2.
GL CACM; Article 16 (4) [Generation and load data provision methodology] 4. The methodology shall specify the deadlines applicable to generation units and loads for providing the information referred to in paragraph 3.	The GLDPM contains deadlines consistent with the CGM process as envisaged at present.
GL CACM; Article 16 (5) [Generation and load data provision methodology] 5. Each TSO shall use and share with other TSOs the information referred to in paragraph 3. The information referred to in paragraph 3(d) [i.e., "(d) relevant available information relating to how generation units will be dispatched"] shall be used for capacity calculation purposes only.	The information referred to in paragraph 3 is shared with other TSOs primarily via its inclusion in IGMs (all of which are available to other TSOs via the OPDE).

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 16 (6) [Generation and load data provision methodology] 6. No later than two months after the approval of the generation and load data provision methodology by all regulatory authorities, ENTSO for Electricity shall publish: (a) a list of the entities required to provide information to the TSOs; (b) a list of the information referred to in paragraph 3 to be provided; (c) deadlines for providing information.	This task has been included in the timescale for implementation as well as in the project plan.
GL CACM; Article 17 (1) [Common Grid Model Methodology] 1. By 10 months after the entering into force of this Regulation all TSOs shall jointly develop a proposal for a common grid model methodology. The proposal shall be subject to consultation in accordance with Article 12.	This article provides the basis for preparing the CGMM and is clearly cited in the sections on the purpose of the document and on legal requirements. As far as the consultation requirements are concerned, see notes on GL CACM Article 12 above.
GL CACM; Article 17 (2) [Common Grid Model Methodology] 2. The common grid model methodology shall enable a common grid model to be established. It shall contain at least the following items: (a) a definition of scenarios in accordance with Article 18; (b) a definition of individual grid models in accordance with Article 19; (c) a description of the process for merging individual grid models to form the common grid model.	Requirement in first sentence explicitly acknowledged in "Purpose of document" section. (a) Scenarios – see section on scenarios (b) IGMs – see chapter on IGMs (c) merging – see chapter on merging
GL CACM; Article 18 (1) [Scenarios] 1. All TSOs shall jointly develop common scenarios for each capacity calculation time-frame referred to in Article 14(1)(a) and (b). The common scenarios shall be used to describe a specific forecast situation for generation, load and grid topology for the transmission system in the common grid model.	Scenarios for the day-ahead and intraday capacity calculation time frames meeting the requirements of this paragraph are described in the section on scenarios
GL CACM; Article 18 (2) [Scenarios] 2. One scenario per market time unit shall be developed both for the day-ahead and the intraday capacity calculation time-frames.	This requirement is met via the section on scenarios which clearly states the need to develop one scenario per market time unit for the GL CACM capacity calculation time-frames.
GL CACM; Article 18 (3) [Scenarios] 3. For each scenario, all TSOs shall jointly draw up common rules for determining the net position in each bidding zone and the flow for each direct current line. These common rules shall be based on the best forecast of the net position for each bidding zone and on the best forecast of the flows on each direct current line for each scenario and shall include the overall balance between load and generation for the transmission system in the Union. There shall be no undue discrimination between internal and cross-zonal exchanges when defining scenarios, in line with point 1.7 of Annex I to Regulation (EC) No 714/2009.	The requirements set out in this paragraph are addressed in the chapter on CGM Alignment. The "no-undue-discrimination" requirement is also addressed explicitly in that chapter.

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 19 (1) [Individual grid model] 1. For each bidding zone and for each scenario: (a) all TSOs in the bidding zone shall jointly provide a single individual grid model which complies with Article 18(3); or (b) each TSO in the bidding zone shall provide an individual grid model for its control area, including interconnections, provided that the sum of net positions in the control areas, including interconnections, covering the bidding zone complies with Article 18(3).	This requirement is explicitly addressed in the IGM creation chapter.
GL CACM; Article 19 (2) [Individual grid model] 2. Each individual grid model shall represent the best possible forecast of transmission system conditions for each scenario specified by the TSO(s) at the time when the individual grid model is created.	This requirement is explicitly addressed in the IGM creation chapter.
GL CACM; Article 19 (3) [Individual grid model] 3. Individual grid models shall cover all network elements of the transmission system that are used in regional operational security analysis for the concerned time-frame.	This requirement is explicitly included in the chapter on IGM creation.
GL CACM; Article 19 (4) [Individual grid model] 4. All TSOs shall harmonise to the maximum possible extent the way in which individual grid models are built.	This requirement is addressed in a separate sub-section in the chapter on IGM creation.
GL CACM; Article 19 (5) [Individual grid model] 5. Each TSO shall provide all necessary data in the individual grid model to allow active and reactive power flow and voltage analyses in steady state.	This requirement is explicitly included in the chapter on IGM creation. It is also discussed in the GLDPM section on the general approach to data provision requirements.
GL CACM; Article 19 (6) [Individual grid model] 6. Where appropriate, and upon agreement between all TSOs within a capacity calculation region, each TSO in that capacity calculation region shall exchange data between each other to enable voltage and dynamic stability analyses.	This article is explicitly referenced in the "Legal requirements" and the "Objectives of the CGM" sections of the CGMM and the GLDPM section on the general approach to data provision requirements.
GL CACM; Article 23 [Methodologies for operational security limits, contingencies and allocation constraints] 1. Each TSO shall respect the operational security limits and contingencies used in operational security analysis. 2. If the operational security limits and contingencies used in capacity calculation are not the same as those used in operational security analysis, TSOs shall describe in the proposal for the common capacity calculation methodology the particular method and criteria they have used to determine the operational security limits and contingencies used for capacity calculation. 3. [not excerpted]	These provisions are discussed in the GLDPM section on the general approach to data provision requirements. They are relevant to understanding the scope of the GLDPM and, in that sense, constitute requirements to be incorporated into the methodologies.
GL CACM; Article 24 [Generation shift keys methodology] 1. The proposal for a common capacity calculation methodology shall include a proposal for a methodology to determine a common generation shift key for each bidding zone and scenario developed in accordance with Article 18. 2. The generation shift keys shall represent the best forecast of the relation of a change in the net position of a bidding zone to a specific change of generation or load in the common grid model. That forecast shall notably take into account the information from the generation and load data provision methodology.	Excerpted for the sake of completeness (because paragraph 2 refers to the GLDPM); however, this article does not contain requirements to be incorporated into the methodologies.

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 25 [Methodology for remedial actions in capacity calculation] 1. Each TSO within each capacity calculation region shall individually define the available remedial actions to be taken into account in capacity calculation to meet the objectives of this Regulation. 2. Each TSO within each capacity calculation region shall coordinate with the other TSOs in that region the use of remedial actions to be taken into account in capacity calculation and their actual application in real time operation. 3. To enable remedial actions to be taken into account in capacity calculation, all TSOs in each capacity calculation region shall agree on the use of remedial actions that require the action of more than one TSO. 4. Each TSO shall ensure that remedial actions are taken into account in capacity calculation under the condition that the available remedial actions remaining after calculation, taken together with the reliability margin referred to in Article 22, are sufficient to ensure operational security. 5. Each TSO shall take into account remedial actions without costs in capacity calculation. 6. Each TSO shall ensure that the remedial actions to be taken into account in capacity calculation are the same for all capacity calculation time-frames, taking into account their technical availabilities for each capacity calculation time- frame.	This article does not directly contain requirements to be incorporated into the methodologies. However, the general topic of including remedial actions in IGMs in an appropriate manner is covered in the chapter on IGM creation and in the chapter on "agreed measures".
GL CACM; Article 27 (1) [General provisions] [NB: These "general provisions" relate to "the capacity calculation process"] 1. No later than six months after the decision on the generation and load data provision methodology referred to in Article 16 and the common grid model methodology referred to in Article 17, all TSOs shall organise the process of merging the individual grid models.	This requirement has been added to the timescale for implementation as a task.
GL CACM; Article 28 (1) and (2) [Creation of a common grid model] 1. For each capacity calculation time-frame referred to in Article 14(1), each generator or load unit subject to Article 16 shall provide the data specified in the generation and load data provision methodology to the TSO responsible for the respective control area within the specified deadlines. 2. Each generator or load unit providing information pursuant to Article 16(3) shall deliver the most reliable set of estimations practicable.	These provisions are explicitly referenced in the "legal requirements" section of the GLDPM.
GL CACM; Article 28 (3) and (4) [Creation of a common grid model] 3. For each capacity calculation time-frame, each TSO shall establish the individual grid model for each scenario in accordance with Article 19, in order to merge individual grid models into a common grid model. 4. Each TSO shall deliver to the TSOs responsible for merging the individual grid models into a common grid model the most reliable set of estimations practicable for each individual grid model.	These obligations are explicitly stated at the beginning of the chapter on IGM creation in the CGMM.
GL CACM; Article 28 (5) [Creation of a common grid model] 5. For each capacity calculation time-frame a single, Union-wide common grid model shall be created for each scenario as set out in Article 18 by merging inputs from all TSOs applying the capacity calculation process as set out in paragraph 3 of this Article.	Obligation is explicitly referenced in the CGMM chapter on merging.
GL CACM; Article 29 (2) [Regional calculation of cross-zonal capacity] 2. Each coordinated capacity calculator shall perform an operational security analysis applying operational security limits by using the common grid model created for each scenario in accordance with Article 28 (5).	Requirement is referenced in the GLDPM section explaining the general approach to data provision requirements as it underlines the link between capacity calculation and operational security analysis

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 29 (3) to (5) [Regional calculation of cross-zonal capacity] 3. When calculating cross-zonal capacity, each coordinated capacity calculator shall: (...) (c) ensure that all sets of bidding zone net positions and flows on direct current lines not exceeding cross-zonal capacity comply with reliability margins and operational security limits in accordance with Article 21(1)(a)(i) and (ii), (...).	Requirement is referenced in the GLDPM section explaining the general approach to data provision requirements as it underlines the link between capacity calculation and operational security analysis
GL CACM; Article 29 (7) [Regional calculation of cross-zonal capacity] 7. Each coordinated capacity calculator applying the flow-based approach shall: (...) (b) use the common grid model, generation shift keys and contingencies to calculate the power transfer distribution factors; (...)	Requirement explicitly referenced in the CGMM section on the objectives of the CGM and the CGMM chapter describing timelines / deadlines.
GL CACM; Article 29 (8) [Regional calculation of cross-zonal capacity] 8. Each coordinated capacity calculator applying the coordinated net transmission capacity approach shall: (a) use the common grid model, generation shift keys and contingencies to calculate maximum power exchange on bidding zone borders, which shall equal the maximum calculated exchange between two bidding zones on either side of the bidding zone border respecting operational security limits; (...)	Requirement explicitly referenced in the CGMM section on the objectives of the CGM and the CGMM chapter describing timelines / deadlines.
GL CACM; Article 43 [Methodology for calculating scheduled exchanges resulting from single day-ahead coupling] (...) (2) (...) The time limit for delivering information [i.e., the information on scheduled exchanges resulting from single day-ahead coupling] shall be no later than 15.30 market time day- ahead.	Deadline is referenced in the corresponding section of the CGMM chapter on timelines/deadlines
GL CACM; Article 45 [Arrangements concerning more than one NEMO in one bidding zone and for interconnectors which are not operated by certified TSOs] 1. TSOs in bidding zones where more than one NEMO is designated and/or offers trading services, or where interconnectors which are not operated by TSOs certified according to Article 3 of Regulation (EC) No 714/2009 exist, shall develop a proposal for cross-zonal capacity allocation and other necessary arrangements for such bidding zones in cooperation with concerned TSOs, NEMOs and operators of interconnectors who are not certified as TSOs to ensure that the relevant NEMOs and interconnectors provide the necessary data and financial coverage for such arrangements. These arrangements must allow additional TSOs and NEMOs to join these arrangements. (...)	Requirement addressed in the GLDPM section on "Categories of generation units and loads covered" for the sake of completeness. The way in which "generation units and loads" are defined in the GLDPM obviates the need for special arrangements for "interconnectors which are not operated by TSOs certified according to Article 3 of Regulation (EC) No 714/2009" pursuant to GL CACM Article 45 (at least as far as the data required for the CGM and capacity calculation / operational security analysis are concerned).
GL CACM; Article 46 [Provision of input data] 1. Each coordinated capacity calculator shall ensure that cross-zonal capacity and allocation constraints shall be provided to relevant NEMOs in time to ensure the publication of cross-zonal capacity and of allocation constraints to the market no later than 11.00 market time day-ahead. (...)	Deadline is explicitly referenced in the relevant section of the CGMM chapter on timelines / deadlines.
GL CACM; Article 57 [Arrangements concerning more than one NEMO in one bidding zone and for interconnectors which are not operated by certified TSOs] 1. TSOs in bidding zones where more than one NEMO is designated and/or offers trading services, or where interconnectors which are not operated by TSOs certified according to Article 3 of Regulation (EC) No 714/2009 exist, shall develop a proposal for cross-zonal capacity allocation and other necessary arrangements for such bidding zones in cooperation with concerned TSOs, NEMOs and operators of interconnectors who are not certified as TSOs to ensure that the relevant NEMOs and interconnectors provide the necessary data and financial coverage for such arrangements. These arrangements must allow additional TSOs and NEMOs to join these arrangements. (...)	See Article 45.

Excerpts	How were requirements incorporated into Methodologies
GL CACM; Article 58 [Provision of input data] 1. Each coordinated capacity calculator shall ensure that cross-zonal capacity and allocation constraints are provided to the relevant NEMOs no later than 15 minutes before the intraday cross-zonal gate opening time. 2. If updates to cross-zonal capacity and allocation constraints are required, due to operational changes on the transmission system, each TSO shall notify the coordinated capacity calculators in its capacity calculation region. The coordinated capacity calculators shall then notify the relevant NEMOs. 3. If any coordinated capacity calculator is unable to comply with paragraph 1, that coordinated capacity calculator shall notify the relevant NEMOs. These NEMOs shall publish a notice to all market participants without unjustifiable delay.	Deadline is explicitly referenced in the corresponding sections of the CGMM chapter on timelines / deadlines. GL CACM Article 58 needs to be read in conjunction with GL CACM Article 59: intraday cross-zonal gate opening and intraday cross-zonal gate closure times remain to be specified. This is clearly acknowledged in the corresponding passages of the CGMM.
GL CACM; Article 59 (1) and (3) [Operation of single intraday coupling] 1. By 16 months after the entry into force of this Regulation, all TSOs shall be responsible for proposing the intraday cross-zonal gate opening and intraday cross-zonal gate closure times. The proposal shall be subject to consultation in accordance with Article 12. (...) 3. One intraday cross-zonal gate closure time shall be established for each market time unit for a given bidding zone border. It shall be at most one hour before the start of the relevant market time unit and shall take into account the relevant balancing processes in relation to operational security. (...)	See Article 58
GL CACM; Article 78 [Costs of establishing and operating the coordinated capacity calculation process] 1. Each TSO shall individually bear the costs of providing inputs to the capacity calculation process. 2. All TSOs shall bear jointly the costs of merging the individual grid models. (...) 3. Any costs incurred by market participants in meeting the requirements of this Regulation shall be borne by those market participants.	These provisions are addressed explicitly in a separate section on cost-sharing in both the CGMM and the GLDPM.
GL CACM; Article 83 [Transitional provisions for Ireland and Northern Ireland] --NOT EXCERPTED—	The transitional provisions for Ireland and Northern Ireland are acknowledged here for the sake of completeness, but are not explicitly discussed in the CGMM and the GLDPM.