Content of question: **How shall the relevant indicator and the capital requirement for operational risk be determined in ordinary and extraordinary situations, for example, at the moments of the incorporation or the conversion of a liable entity or at the moment of winding up some activities?** Answered by: **Růžena Víšková** Approved by: **Pavel Vacek** Date: **26 February 2009**	

Piece of law	**Decree No. 123/2007 Coll. (as amended)**
Provision	**Articles 170 – 175** **Annex 22**
Explanation	***1. Determining the relevant indicator and the capital requirement for operational risk in ordinary situations*** ***1.1 The relevant indicator*** **The relevant indicator** is an indicator of the liable entity's exposure to operational risk. Its value should reflect the current and possibly the future situation of the liable entity as accurately as possible, i.e. it should reflect the amount of operational risk the liable entity is and perhaps will be exposed to. In normal conditions, the calculated value of the relevant indicator and the information this figure conveys remain significant for a period of approximately one year. If there is no substantial change to the conditions, the liable entity shall determine an updated value of the relevant indicator on the basis of new data after the one-year period elapses. The relevant indicator is a key component in determining the capital requirement for operational risk according to **the BIA Approach, the TSA[1] Approach and the ASA Approach.** The relevant indicator and the capital requirement for operational risk are determined on both an individual basis and a consolidated basis. The relevant indicator is based upon **the sum of the net interest income and the net non-interest income[2]**, further individually adjusted by additional possible items[3].

[1] TSA is an abbreviation denoting the Standardised Approach to calculating the operational risk capital requirement.
[2] The Annex of the Official Information of the Czech National Bank of 24 June 2008 amending the Annex of the Official Information of the Czech National Bank of 18 July 2007 regarding the prudential rules for banks, credit unions and investment firms, Operational Risk.
[3] For example, it is possible to deduct the costs of outsourcing provided by a person having close links with the liable entity, which is a person meeting the definition given in paragraph 6 of Article 4 of Act No. 21/1992 Coll., on Banks, as amended.

The idea behind the relevant indicator (and the method the capital requirement for operational risk is calculated according to the BIA, TSA and ASA Approaches) is to make sure that occasional fluctuations are smoothed and excessive volatility of the results does not occur over time. Therefore, the scope of the calculation covers data observed over **a three-year period**. Each further year means that the data set moves forward by one year. The relevant indicator is calculated from the data **as at the last day** of each of the three last **financial years, verified by an auditor**.

1.2 The use of the relevant indicator under the BIA, TSA and ASA Approaches

For the purpose of calculating the capital requirement for operational risk, the relevant indicator is used differently in conjunction with each of the BIA, TSA and ASA Approaches.

Whereas under **the BIA Approach** the relevant indicator is determined for all activities of the liable entity taken together, under **the TSA Approach** the indicator is determined for each individual business line. Therefore, under the TSA approach the procedure is as follows: the sum of the net interest income and the net non-interest income, adjusted by additional possible items and multiplied by the respective value of parameter beta, is determined for each business line and for each individual financial year ; subsequently, these risk-weighted amounts of the relevant indicators are summed over the business lines (i.e. the capital requirements for operational risk for the individual business lines) in each financial year (negative values are reflected at this point, i.e. they are deducted). The following step in calculating the overall capital requirement (i.e. determining the three-year average) consists

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[4] The way of, the frequency of, and the time-limits for liable entities' reporting the relevant indicator and the operational risk capital requirement to the Czech National Bank are specified in the Provision of the Czech National Bank No. 2 of 28 November 2008 concerning the submitting of statements by banks and foreign bank branches to the Czech National Bank and the Provision of the Czech National Bank No. 3 of 25 June 2007 concerning the submitting of statements by credit unions to the Czech National Bank; the reporting duty follows the methodology valid for 2009, which is available at https://wsn.cnb.cz/ewi/gui/cnb/jsp/index.jsp?APPL=pmi&FO=1&CASBOD=30.01.2007&COUNTRY=CZ&LANGUAGE=cs&CONTEXT_DS_IID=151

[5] Guidelines on the Implementation, Validation and Assessment of Advanced Measurement (AMA) and Internal Ratings Based (IRB) Approaches (CEBS), April 2006, available at *http://www.c-ebs.org/formupload/95/95a5bdac-1fd0-4231-9ef4-7b42f65031d9.pdf*

[6] Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions (recast); Decree of the Czech National Bank No. 123 of 15 May 2007, stipulating the prudential rules for banks, credit unions and investment firms; Official Information of the Czech National Bank of 18 July 2007 regarding the prudential rules for banks, credit unions and investment firms, Operational Risk; Official Information of the Czech National Bank of 24 June 2008 amending the Annex of the Official Information of the Czech National Bank of 18 July 2007 regarding the prudential rules for banks, credit unions and investment firms, Operational Risk; Act No. 563/1991 Coll., on Accounting (the Accounting Act); Act No. 125/2008 Coll., on conversions of business companies and co-operatives; answers to questions on the implementation of the so-called Basel II, prepared by the Capital Requirements Directives Transposition Group (CRD TG), working under the auspices of the European Commission, which are published, for example, at www.c-ebs.org; guidelines of the European Committee of Banking Supervisors (CEBS) on common European Reporting – COREP; CEBS; October 2006, see www.c-ebs.org; the so-called Basel II (International Convergence of Capital Measurement and Capital Standards: a Revised Framework, issued by BCBS in January 2006, see ww.bis.org.

	in summing only the positive figures (of the three sums of the risk-weighted amounts of the relevant indicators) and dividing this sum always by three. **Under the ASA Approach** the method of determining the relevant indicator is similar to the method used under the TSA Approach, with the difference that, if certain conditions for particular business lines are met (namely, either the retail banking business line or the commercial banking business line or both), **an alternative indicator** is used, determined (in the same manner as the relevant indicator would be) on the basis of **the data as at the last day of each of the three financial years in question.** **Interim financial statements are not used for the purpose of determining the capital requirement for operational risk.** The data used are data collected from ordinary financial statements and possibly extraordinary financial statements, that is, for example, as at the day which precedes the decisive day for the firm's conversion. ***1.3 The use of audited or unaudited data*** The data to be used for the purpose of determining the relevant indicator are the income statement data from the **last three** financial years, **verified by an auditor**. **Until the liable entity has audited data available for the immediately preceding financial year** *x-1*, the relevant indicator (and the operational risk capital requirement) is determined on the basis of the data for financial years ***x-2, x-3 and x-4*** (however, not after the period determined by the respective sector law for approving and disclosing its audited financial statement expires; this period is four months since the end of the financial year in the case of banks and investment firms and six months since the end of the financial year in the case of credit unions). As soon as the liable entity obtains data for financial year *x-1* at time *x* (i.e. immediately after obtaining the auditor's opinion on its financial statement for financial year *x-1*, without waiting for the opinion on the annual report and without waiting for the approval of the audited financial statement by the general assembly or general meeting of members), it shall determine and report[4] to the Czech National Bank the relevant indicator (and the capital requirement for operational risk) on the basis of the data for **financial years *x-1, x-2 and x-3,*** which figure shall be included in the report for the month the auditor's opinion was obtained**.** In case audited data are not available even after the statutory period for approving and disclosing the financial statement expires, the liable entity shall use unaudited data for **financial years *x-1 and audited data for financial years x-2 and x-3*.** The new value of the relevant indicator shall be reported to the Czech National Bank. When the liable entity has audited data available and these data are different from the used unaudited data, it shall determine and report to the Czech National Bank the updated value of the relevant indicator and the capital requirement for operational risk.

1.4 Determining and reporting the capital requirement for operational risk on a consolidated basis

A regulated consolidated group (formed pursuant to Articles 5 and 6 of the Decree) can include both persons obliged to determine a capital requirement for operational risk on an individual basis and possibly other persons that are not obliged to do so.

The capital requirement for operational risk for a regulated consolidated group shall be determined in the following manner.

1) **If the liable entity is entitled to combine different approaches** to calculating the capital requirement for operational risk, the capital requirement for the regulated consolidated group is determined, pursuant to Article 51, 3 of the Decree, as **the sum of the capital requirements for operational risk calculated for each individual entity included in the regulated consolidated group as at the given date**. Persons having to determine and maintain a capital requirement for operational risk on an individual basis shall include in the sum an amount corresponding to the mandatory capital requirement on an individual basis and, if there are any other entities included in the regulated consolidated group formed by the liable entity as at the given date, one of the basic approaches to determining the capital requirement for operational risk shall be used, i.e. either the BIA Approach or the TSA Approach.

A review of permitted combinations of approaches to determining the capital requirement for operational risk is provided in the following table[5]:

	Group BIA Approach	Group TSA Approach (or ASA)	Group AMA Approach
BIA used by a subsidiary	-	Combination acceptable	Combination acceptable
TSA (or ASA) used by a subsidiary or for a business line	Combination **not** acceptable	-	Combination acceptable
AMA used by a subsidiary or for a business line	Combination acceptable	Combination acceptable	-

In view of the fact that a regulated consolidated group can consist of entities from different sectors with different periods for disclosing their financial statements stipulated by sector laws and these individual entities obtain data individually at different points of time, the sum of the operational risk capital requirements for all entities in the regulated consolidated group reported[4] to the Czech National Bank for the first quarter will usually be the sum of the individual capital requirements for operational risk calculated on the basis of data from different three-year periods. The operational risk capital requirement reported for the second quarter (i.e. as at the end of the half year) will already be based on individual operational risk capital requirements calculated over identical three-year periods for all entities.

2) **In case the liable entity is not entitled to combine different approaches** to calculating the capital requirement for operational risk, it shall calculate the capital requirement for operational risk on the basis of **the consolidated income statement data**.

The liable entity may find it convenient to individually consult its particular approach to calculating the capital requirement for operational risk with the Czech National Bank.

1.5 Changes of the relevant indicator and the capital requirement for operational risk in the course of the year

The value of the relevant indicator (and the **capital requirement for operational risk** determined by one of the BIA, TSA and ASA Approaches) becomes **changed after a decisive event**. The liable entity shall report the new value of the relevant indicator and the capital requirement for operational risk to the Czech National Bank.

Decisive events are, most of all:

- obtaining audited data (i.e. obtaining the auditor's opinion on the financial statement) for the immediately preceding financial year,
- obtaining audited data for the immediately preceding financial year after the expiry of the statutory period, in a situation where the audited data differ from the used unaudited data,
- obtaining audited data within the statutory period, different from the unaudited data which have been used for determining the capital requirement for operational risk in an extraordinary situation (for example, in the case of a firm with a shorter history than three financial years),
- a change of the approach used for calculating the capital requirement for operational risk,
- a change in the liable entity's internal methodology for determining the relevant indicator, e.g. a decision on a change in the manner of reflecting the costs of outsourcing provided by a person having close links with the liable entity in reducing the relevant indicator,
- an extraordinary event (e.g. the incorporation of a liable entity, a conversion of a business company, winding up an activity etc.),
- a significant change in the structure or the volume of the liable entity's activities in comparison with previous periods,
- a correction in the financial statement,
- in the case of determining the capital requirement for operational risk on a consolidated basis, e.g. an inclusion of new entities in the regulated consolidated group,
- etc.

Example 1

Determining the new value of the relevant indicator and the capital requirement for operational risk.

A bank obtains the auditor's opinion on its financial statement for financial year 2008 on 18 February 2009 and the auditor's opinion on its annual report on 1 March 2009. The bank uses the TSA Approach for the calculation of the capital requirement for operational risk. When will the bank determine the new values of the relevant indicator and the capital requirement and how will these figures be reported to the Czech National Bank?

The situation implies that the bank's capital adequacy report DISIFE20 for February (data field DIS20_02) will contain the new value of the capital requirement for operational risk (in line 47 and, at the same time, in line 45 "the overall capital requirement for operational risk"), determined anew on the basis of audited data for 2006, 2007 and **2008,** and the report will be submitted to the Czech National Bank by 28 March 2009. The previous amount of the capital requirement for operational risk, determined on the basis of audited data for 2005, 2006 and 2007, will be reported in the capital adequacy report DISIFE20 for January 2009 and submitted to the Czech National Bank by 28 February 2009.

The bank will (after the decisive event of obtaining audited data on 18 February 2009) simultaneously submit to the Czech National Bank the report DISIFE21. Its data field DIS21_01, namely the lines corresponding to the business lines into which all the bank's activities are mapped, will contain detailed information on the relevant indicator (i.e. the sum of the net interest income and the net non-interest income, adjusted by other possible items **before its weighting** by the relevant beta parameter) for financial year 2006 (the column "the last day of the year before the year before last in question"), for financial year 2007 (column "the last day of the year before last in question") and for financial year 2008 (column "the last day of the last year in question").

<u>2. Determining the relevant indicator and the capital requirement for operational risk in selected extraordinary situations</u>

In extraordinary situations, like, for example, the incorporation of a liable entity, a merger, a demerger, winding up some activities etc., the liable entity should determine the capital requirement for operational risk in a manner that the capital requirement will be neither substantially overestimated nor substantially underestimated, which would result in reporting an amount not reflecting the actual exposure of the liable entity to operational risk accurately enough and not corresponding to the situation the liable entity currently finds itself in.

In determining the capital requirement for operational risk, the liable entity follows rules (determined by relevant pieces of law and presented in explanatory standpoints which relate to these pieces of law in more detail)[6] and respects general principles arising from recognised standards[5,6]. All illustrative examples in this document are based on these rules and principles, which can be summarised in the following way:

The liable entity uses data as at the last day of each of the three last audited

twelve-month financial years. Typically, this very type of required data is not available in extraordinary situations; therefore, the liable entity will use unaudited data instead of audited data, or competent estimates instead of accounting data (for example, at the moment of the liable entity's incorporation), or, possibly, it will need to use data for a period of a different length than the required twelve months.
Whenever possible and purposeful, the liable entity will always prefer historical data, albeit unaudited, to a plan (or a competent estimate) in extraordinary situations, and if it resorts to using financial years of a different length, not aggregately forming a three-year (36-month) time period as required, these will be converted to an annual basis.

The liable entity may find it convenient to consult its particular approach to determining the relevant indicator and the capital requirement for operational risk in extraordinary situations individually with the Czech National Bank. This would be done in accordance with Annex 22, I, b) 1 to the Decree.

2.1 The incorporation of a liable entity (without prior history)

The liable entity shall determine the relevant indicator on the basis of a plan, possibly adjusted in accordance with requirements made by the Czech National Bank. Historical data enter into the calculation as soon as they are available (i.e. the liable entity shall use unaudited data until audited data are available).

If a firm is incorporated in the three months immediately preceding the end of a calendar year, the financial year may be, pursuant to Article 3 of the Accounting Act, longer than twelve months. Data for a longer financial year than the standard twelve months shall be converted to an annual basis for the purpose of determining the capital requirement for operational risk (which will be achieved by their dividing by the actual number of months in the financial year in question and, subsequently, by multiplying by twelve).

Example 2
The incorporation of a liable entity occurring approximately in the middle of a year.
How will the capital requirement for operational risk be determined by a liable entity which was incorporated on 1 May 2008?
In 2008 the liable entity will determine the capital requirement for operational risk according to its plan, which will possibly be adjusted in accordance with requirements made by the Czech National Bank.
At the beginning of 2009 (after compiling the financial statement for the financial year from 1 May 2008 to 31 December 2008) the liable entity will determine the relevant indicator on the basis of data as at 31 December 2008 converted to an annual basis, which will be achieved by dividing the data by 8 and multiplying them by 12. Data based on its plan will be used in relation to the two remaining financial years and these will possibly be adjusted in accordance with requirements made by the Czech National Bank. As soon as the financial year becomes audited, the liable entity will use the audited data for the purpose of determining the capital requirement for operational risk if

	these are different from the unaudited data, converted to an annual basis. At the beginning of 2010 the liable entity will determine the relevant indicator on the basis of these data: - the audited data converted to an annual basis, for the financial year from 1 May 2008 to 31 December 2008, - unaudited data for the financial year from 1 January 2009 to 31 December 2009 and - the planned data for 2010. The liable entity will adjust the amount of the capital requirement for operational risk during 2010 at least in case audited data appear to be different from the used unaudited data (and, additionally, in case any further decisive event occurs). **Example 3** **A liable entity is incorporated in the three months immediately preceding the end of a calendar year.** How will the capital requirement for operational risk be determined by a liable entity which was incorporated on 1 November 2007? The first financial year for the liable entity will be a fourteen-month period. In 2008 the liable entity will determine the relevant indicator and the capital requirement for operational risk on the basis of its plan, possibly adjusted in accordance with requirements made by the Czech National Bank. At the beginning of 2009 the liable entity will determine the relevant indicator on the basis of actual historical data (unaudited data will be used until audited data are available) as at the last day of the financial year from 1 November 2007 to 31 December 2008, which will be converted to an annual basis by dividing by 14 and multiplying by 12. Data based on its plan will be used for the following two financial years. If audited data for the financial year from 1 November 2007 to 31 December 2008 obtained within the statutory period are different from the used unaudited data, the new value of the relevant indicator and the capital requirement for operational risk will be determined and reported to the Czech National Bank. At the beginning of 2010 the liable entity will use the following kinds of data for determining the capital requirement for operational risk: the converted audited data as at 31 December 2008, unaudited data (until audited data are available) as at 31 December 2009 and the planned data for 2010 for the third period in question, possibly adjusted according to requirements made by the Czech National Bank. ***2.2 Conversions of business companies and co-operatives*** ***2.2.1 Mergers*** **Until the time a merger is entered in the Commercial Register, liable entities keep their accounting separately and submit reports to Czech National Bank separately, in the same manner as before the decisive day of the merger. The successor entity submits first reports to the Czech National Bank for the month in which the merger was entered in the**

	Commercial Register. The successor accounting unit adjusts the accounting of the participating accounting units as at the date of the entry with effects from the decisive day of the merger. Article 3 of the Accounting Act lays down the following principle. In the case of a conversion of a company or co-operative the financial year shall commence as of the decisive day and terminate on the last day of the financial year in which the relevant facts are entered in the Commercial Register, if this concerns a successor accounting unit. As regards participating accounting units, the financial year shall terminate on the day which precedes the decisive day. **Data for a financial year of a non-standard length will need to be converted, for the purpose of determining the capital requirement for operational risk, to an annual basis if the three financial years in question taken together do not form a three-year period (36 months, i.e. three 12-month periods).** ***2.2.1.1 Mergers of companies which used different approaches to calculating the capital requirement for operational risk before the merger*** A merger is regarded as an extraordinary event subsequent to which the liable entity is entitled (after obtaining the prior approval of the Czech National Bank and agreeing upon a timetable with the Czech National Bank to switch fully to a uniform approach) to use **a combination of the approaches** to determining the capital requirement for operational risk (a table with a review of permitted combinations of approaches is given in this document). The resulting capital requirement will be (over the transitional period) determined (pursuant to Article 51, 3 of the Decree) **as a simple sum of the individual capital requirements for operational risk of all participating entities.** ***2.2.1.2 Mergers of companies using the same approach to calculating the capital requirement for operational risk*** In case the persons used the same approach for the calculation of the capital requirement for operational risk before the merger, the capital requirement of the successor company will be determined on the basis of data from the **consolidated income statement, compiled retrospectively for** each of the **three financial years** in question. Considering possible costs and difficulties associated with the so-called retrospective consolidation of certain entities, the successor entity may determine the capital requirement for operational risk, after a consultation with the Czech National Bank, possibly by summing the individual capital requirements for operational risk of all entities (even in case the entities participating in the merger used the same approach for the calculation of the capital requirement for operational risk). This approach is applied, above all, in instances where the costs of the retrospective consolidation would prevail over its benefits.

	Example 4 **A merger of two persons using the same approach for the calculation of the capital requirement for operational risk** *The decisive day of the merger is 1 August 2008 and the merger was entered in the Commercial Register on 25 March 2009. How will the capital requirement for operational risk be determined?* In cases of conversions of business companies and co-operatives the financial year starts on the decisive day and terminates on the last day of the financial year in which the relevant facts are entered in the Commercial Register, if this concerns a successor accounting unit. In the case of participating accounting units the financial year terminates on the day which precedes the decisive day, namely 31 July 2008 in this particular instance. As soon as both liable entities obtain audited data for financial year 2007 at the beginning of 2008, they will determine their own relevant indicator and capital requirement for operational risk on the basis of audited data from 2007, 2006 and 2005. The amount of the capital requirement for operational risk calculated on the basis of these data will be reported by the liable entities until they obtain audited data for the financial year from 1 January 2008 to 31 July 2008. As soon as they obtain these audited data (i.e. as soon as they obtain the auditor's opinion on the financial statement for this last financial year), they will calculate a new amount on the basis of data from 2006, 2007 and the seven-month financial year of 2008, converted to an annual basis (by dividing by 7 and multiplying by 12). The new amount will be reported to the Czech National Bank by both entities in the month in which they obtained the auditor's opinion on the financial statement, along with reporting the new value of the relevant indicator in the relevant financial report. The first month in which successor company will report the capital requirement for operational risk to the Czech National Bank will be March 2009. The relevant indicator and the capital requirement for operational risk will be determined on the basis of both merging companies' audited data, namely by the retrospective consolidation of their financial reports for 2006, 2007 and the period from 1 January 2008 to 31 July 2008; the resulting figures for this last period in question will be converted to an annual basis. The amount of the capital requirement for operational risk will be changed in 2010 at the moment when the successor company has audited data available for the period from 1 August 2008 to 31 December 2009. It will not be necessary to convert any of the data to an annual basis at this point, because the data entering into the calculation will be aggregate data for 36 months, i.e. financial year 2007, the financial year from 1 January 2008 to 31 July 2008 and the last financial year in question – from 1 August 2008 to 31 December 2009. The data set will move forward by one period in 2011; therefore, the relevant indicator and the capital requirement for operational risk will be calculated on the basis of data for the financial years from 1 January 2008 to 31 July 2008, from 1 August 2008 to 31 December 2009 and for the period from 1 January 2010 to 31 December 2010, without converting any of the financial years in question to the standard length of a financial year. The conversion will become relevant in 2012, when data for the period from

	1 August 2008 to 31 December 2009 will need to be converted to an annual basis (by dividing by 17 and multiplying by 12); at the same time audited data for 2010 and 2011 will also enter into the calculation. ***2.2.2 Demergers*** In the case of a demerger of a business undertaking, each entity will use only those data for the purpose of determining the capital requirement for operational risk which relate by nature to the activities performed by the entity and to the results of these activities. Considering the fact that the financial year begins, pursuant to the Accounting Act (paragraph 2 of Article 3), on the decisive day and terminates on the last day of the financial year in which the entry in the Commercial Register was made, some of the financial years in question entering into the calculation of the relevant indicator and the capital requirement for operational risk may be of a length other than the standard twelve months and, consequently, the data for such period will need to be converted to an annual basis. ***2.3 Terminating an activity*** **In case the liable entity winds up a service or an activity** in a particular year (x), the activity will nevertheless continue to be included in the relevant indicator and enter into the calculation of the capital requirement for operational risk until the data set moves in time to the point where financial reports will not contain this activity any more. **Example 5** **Terminating an activity.** *The liable entity wound up a particular activity in June 2008. How will the capital requirement be determined?* The activity performed until June 2008 will still be reflected in the amount of the capital requirement for operational risk calculated in 2011 on the basis of audited data from 2008, 2009 and 2010. This amount will continue to be reported until the liable entity has audited data available for 2011. Therefore, the activity in question will still be actually reflected at the beginning of 2012. ***2.4 A correction in the financial statement*** In case the **liable entity makes a correction in the financial statement** and the correction affects the data used for the calculation of the capital requirement for operational risk, the liable entity will determine, in relation to this decisive event, the amount of the relevant indicator and the capital requirement for operational risk anew and report it to the Czech National Bank in the relevant financial reports for the month in which the correction was made. **Example 6**

	A correction in financial statements. *Let us assume a situation where the liable entity makes a correction in the financial statements for the last financial year (2008) and the financial year before last (2007) in March 2009. The correction affects certain income statement items entering into the calculation of the relevant indicator*. The liable entity will base the calculation on the corrected items of the income statement and determine the amounts of the relevant indicators for the last financial year and the financial year before last, which (together with the value of the relevant indicator for the financial year before the one before last) will be reported to the Czech National Bank in the DISIFE21 report and, simultaneously, the new amount of the capital requirement for operational risk will be determined and reported in the DISIFE20 report for February 2009, i.e. by 28 March 2009.