



ISLAMIC FINANCIAL SERVICES BOARD

**EXPOSURE DRAFT
TECHNICAL NOTE ON STRESS TESTING FOR
INSTITUTIONS OFFERING ISLAMIC FINANCIAL
SERVICES (IIFS) [TN-2]**

**SUMMARY OF COMMENTS RECEIVED DURING
PUBLIC CONSULTATION AND THE IFSB
SECRETARIAT RESPONSES**

Release Date of this Summary : June 2017

Public Consultation Period : 21 March to 21 June 2016

Release Date of TN-2 : December 2016

Web URL of TN-2 : <http://ifsb.org/published.php#TN>

BACKGROUND

1. On 14 December 2016, the Council of the Islamic Financial Services Board (IFSB) in its 29th Meeting, held in Cairo, Egypt approved the adoption of a new IFSB Technical Note on Stress Testing for Institutions Offering Islamic Financial Services (IIFS).
2. The Technical Note on Stress Testing for IIFS (TN-2) aims to provide regulatory and supervisory authorities (RSAs) and market players of the Islamic banking industry with the appropriate technical guidance to develop, conduct and assess stress tests. The document addresses multiple types of risks and their interrelated effects on the overall financial position and performance of the portfolio, institution, group or system. These risks include, but are not limited to, credit risk within financing portfolios, market risk on assets held, foreign exchange risk, liquidity risk, rate of return risk, as well as discussions on aspects of Sharī'ah non-compliance risk.
3. As part of the due process in the preparation of IFSB Standards and Guidance/Technical Notes, and following approval by the IFSB Technical Committee in its 38th Meeting held on 17 March 2016 in Kuala Lumpur, Malaysia, the Secretariat released an Exposure Draft of TN-2 (ED TN-2) for a public consultation process for a period of three months between March and June 2016. This included a Public Hearing held on 25 April 2016 in Kuala Lumpur, Malaysia.
4. The Public Consultation process gathered a good response and a total of 227 comments were received from 47 different IFSB member and non-member institutions/individuals. These comments include verbal comments received during the Public Hearing. Particularly, there was a noteworthy interest from the market players to ED TN-2.
5. In line with the recommendations in paragraph 5.11 of the revised 'Guidelines and Procedures for the Preparation of Standards and Guidance/Technical Notes – April 2016', this document is released as a summary of the main feedback to ED TN-2 received during the Public Consultation process, along with the key actions undertaken by the Secretariat.

COMMENTS* ON ED TN-2

No.	Name of Institution/Body/Individual**	IFSB Membership Type
1.	Bangladesh Bank	Full
2.	Bank Negara Malaysia	Full
3.	Central Bank of Kuwait	Full
4.	Indonesia Financial Services Authority	Full
5.	Islamic Development Bank	Full
6.	Securities and Exchange Commission Nigeria	Full
7.	State Bank of Pakistan	Full
8.	Bank of England	Associate
9.	Bank of Korea	Associate
10.	Bangko Sentral Ng Pilipinas	Associate
11.	International Monetary Fund	Associate
12.	Malaysia Deposit Insurance Corporation	Associate
13.	Qatar Financial Centre Regulatory Authority	Associate
14.	AlBaraka Banking Group, Bahrain	Observer
15.	Al Baraka Bank, Egypt	Observer
16.	Asian Finance Bank, Malaysia	Observer
17.	Amlslamic Bank Berhad, Malaysia	Observer
18.	Al Salam Bank, Bahrain	Observer
19.	Bank Al Khair, Bahrain	Observer
20.	Bank Kerjasama Rakyat Malaysia Berhad, Malaysia	Observer
21.	Bank Muamalat, Indonesia	Observer
22.	Central Bank of Oman	Observer
23.	CIMB Islamic, Malaysia	Observer
24.	Emirates Islamic Bank / Emirates NBD [#] , UAE	Observer
25.	First Energy Bank, Bahrain	Observer
26.	Gulf International Bank, Bahrain	Observer
27.	Insurance Authority, UAE	Observer
28.	Japan Bank for International Cooperation, Japan	Observer
29.	Kuveyt Turk Participation Bank, Turkey	Observer
30.	Kuwait Finance House, Bahrain	Observer
31.	Kuwait Finance House, Kuwait	Observer
32.	Kuwait Finance House (Malaysia) Berhad, Malaysia	Observer
33.	Masraf Al Rayan, UAE	Observer
34.	National Bank of the Kyrgyz Republic	Observer
35.	National Commercial Bank, Kingdom of Saudi Arabia	Observer
36.	RHB Islamic Bank / RHB Group [#] , Malaysia	Observer
37.	Saudi British Bank, Kingdom of Saudi Arabia	Observer
38.	Securities and Exchange Commission of Pakistan	Observer
39.	Tadamon Islamic Bank, Sudan	Observer
40.	Turkiye Finans Katilim Bankasi, Turkey	Observer
41.	ABC Islamic Bank, Bahrain	Non-Member
42.	ALM-Solutions, France/Philippines	Non-Member
43.	Ibdar Bank, Bahrain	Non-Member
44.	Ithmaar Bank, Bahrain	Non-Member
45.	Investment Dar Bank, Bahrain	Non-Member
46.	Liquidity Management Centre, Bahrain	Non-Member
47.	Mustafa Aydemir	Non-Member

* Verbal comments included, received during the Public Hearing on 25 April, 2015

** Arranged in alphabetical order as per Membership Type

Indicates that these two institutions sent in joint consolidated comments

Summary of Main Comments and the IFSB’s Responses

General Comments

Section I: Background

No.	Theme	Issues / Comments	IFSB Response / Actions
1.	TN-2 AS AN INITIATIVE	A number of comments expressed appreciation on the timely technical work on stress testing for Islamic banks. Others welcomed TN-2’s approach where it recognised that a "one size fits all" approach for carrying out stress tests was inappropriate. A number of market players also expressed that their existing stress testing practices are in conformity with TN-2.	No action required
2.	DESIGNING STRESS SCENARIOS	Some comments requested aspects related to designing of stress scenarios should include the following: <ul style="list-style-type: none"> • Commodity prices shocks • Run-off rates on profit-sharing accounts in liquidity risk stress testing • Stress testing in various conditions – mild, moderate, and extreme • 	Various factors were duly incorporated and discussed in different sections of TN-2 including in paragraph 69, paragraphs 73-75 and also in paragraphs 182-185. Run-off factors due to Displaced Commercial Risks and their impact (if any) on PSIAs were also duly discussed in Section 4.
3.	SCENARIO STRESS TESTING / REVERSE STRESS TESTING	Some comments highlighted that TN-2 did not discuss stress testing from a scenario analysis perspective, and focused primarily on sensitivity analysis.	Scenario stress tests (linking credit and market risks) are part of TN-2 in Section 3.5.2 (with an accompanying stress testing template). The use and value of reverse stress tests are discussed in paragraphs 49, 56, 75 and 213.

No.	Theme	Issues / Comments	IFSB Response / Actions
4.	INTEGRATED SOLVENCY AND LIQUIDITY STRESS TESTING	Some comments requested for guidance on integrated solvency and liquidity stress testing exercises which are the recent developments and innovations in the field of stress testing.	Integrated, network contagion and second-round effects stress tests are very recent developments which are not the objective of this TN-2. Nonetheless, TN-2 introduced Section 5 which highlights relevant aspects and developments of this area, but as is clarified in paragraph 220, the current models that attempt to simulate integrated stress tests are very limited.
5.	ACCOUNTING STANDARDS / IFRS-9	Some comments wished to seek some guidance on the implications from IFRS-9's Expected Credit Losses Model on Stress Testing Exercises in Banks / Islamic Banks.	<p>The guidelines are prepared to ensure compliance with respective local accounting and auditing standards. For instance, footnote 29 in the TN-2 reads:</p> <p><i>“The actual treatment will depend upon the accounting methods/standards as applied in various jurisdictions.”</i></p> <p>The implications of IFRS-9 on Islamic banks are being discussed by the IFSB's Technical Committee separately and the IFSB Secretariat will take appropriate steps to research and provide guidance on this subject in due course.</p>
6.	TOP-DOWN / BOTTOM-UP STRESS TESTING	Some comments requested examples and clarity on bottom-up (BU) and top-down (TD) stress tests.	The Task Force resolved to remove discussion and mention of terms top-down and bottom-up / micro-level and macro-level stress tests from the main text of TN-2 (they are however discussed in appendices) as they have attracted different interpretations in literature and sometimes created confusion. Instead, it was resolved to use terms - institutional-level, system-wide level and industry-wide level stress tests - which TN-2 has accordingly done.

No.	Theme	Issues / Comments	IFSB Response / Actions
7.	IMPLEMENTATION OF LIQUIDITY STRESS TESTING	Some comments welcomed the liquidity stress testing guidance for Islamic banks in TN-2 but requested the IFSB not to impose any timeline with regard to their implementation as often building liquidity stress testing framework is still challenging for Islamic banks.	TN-2 is not providing any timeline for implementation, the decision of which rests purely with the various respective RSAs. The TN-2 provides a suggested model or template for conducting liquidity stress tests for Islamic banks, taking into account the specificities of Islamic Financial Services Industry (IFSI).
8.	STRESS TESTING FOR MARKET PLAYERS	Some comments suggested that TN-2 has been developed more from a Regulatory and Supervisory (RSA) perspective and did not offer sufficient guidance for market players.	TN-2 attempts to provide balanced guidance to both RSAs and Islamic banks as much as possible. Various Sections of TN-2 give due importance and discussion towards steps needed to be undertaken by the RSAs and Islamic banks respectively. As an example, Section 2.1 dedicates paragraphs 21-30 mainly to Islamic banks and specifically discusses RSA perspectives in paragraphs 31-34.
9.	RISK-SHARING & RISK-TRANSFER BANKING MODELS	Some comments suggested that TN-2 needs to have additional analysis on issues surrounding risk sharing versus risk-transfer banking models within the stress-testing framework.	<p>The stress test models and templates automatically capture the resulting risks regardless an IIFS (or even the IFSI as a whole) is based on a risk-sharing model or a risk-transfer model, or even a combination of both. In TN-2, examples of such are credit shock 1 versus credit shock 3 and market shock 1 versus market shock 4 whereas the former assumes a risk-transfer portfolio while the latter assumes a partial risk-sharing portfolio (using regulatory alpha).</p> <p>A discussion on them also follows in Section 3.5.1.</p>
10.	SYSTEM-WIDE STRESS TESTING IN DUAL SYSTEMS	A number of comments asked for guidance on how RSAs should conduct a system wide stress test which includes both Islamic (stand-alone and windows) and the conventional banks.	TN-2 addresses this issue in Section 3.6 by adding paragraphs 157 to 162 which discusses the possible approaches to this question.

No.	Theme	Issues / Comments	IFSB Response / Actions
11.	GROUP-WIDE STRESS TESTING	Some comments asked for guidance on group-wide stress tests where an Islamic banking business subsidiary has a conventional parent bank.	TN-2 addresses this issue in Section 3.6 in paragraphs 160 to 162 which discusses the possible approaches to this question.
12.	STRESS-TESTING FOR SMALLER BANKS	Some comments suggested that sophisticated stress-testing is difficult for smaller banks, as this will consume enormous resources and will require large investments.	TN-2 allows some room for flexibility for smaller-scale IIFS. For instance, among others, paragraph 57 states: <i>“An IIFS’s stress-testing framework should be commensurate with the size, nature, complexity and sophistication of its risk profile and business activities. In general, a more sophisticated or complex IIFS should use a combination of sensitivity analysis and scenario tests (or any other appropriate concept) to capture all aspects of risks.”</i>
13.	TIME-HORIZON / FREQUENCY OF STRESS TESTING	A number of comments called for clarifying the time-horizon of stress testing as TN-2 templates only account for one year. Also, comments asked for clarifying frequency of stress-testing as ED TN-2 was currently silent on this matter.	To address this issue, TN-2 introduced paragraph 64 in Section 3.1 related to time horizon and revised paragraph 33 in Section 2.1 to clarify on frequency of stress testing.
14.	RATE OF RETURN RISK STRESS TESTING	A number of comments requested to include a separate section to address rate of return risk in banking book, given BCBS’s recently published standard on this.	As recommended, TN-2 added Section 3.4.4 on Rate of Return Risk in the Banking Book (RRRBB) of the Islamic banks and also added an accompanying stress testing template for this purpose.
15.	SHARĪ’AH NON-COMPLIANCE RISK (SNCR)	A number of comments requested to improve guidance on SNCR as currently it was insufficient in the Exposure Draft.	The section 3.4.3 on SNCR has been substantially revised in TN-2 based on various feedback received.

No.	Theme	Issues / Comments	IFSB Response / Actions
16.	SCOPE OF STRESS-TESTING INVESTMENT ACCOUNTS	Comments requested to expand the scope of stress testing to the impact of exposure of the Islamic banks to the underlying assets of the investment accounts – beyond simply looking at liquidity risk run-off factors from the account holders’ perspective.	The necessary scope was relevantly added in Section 4.3 as point (d) in paragraph 183.

Section II: Basic Requirements for Conducting Stress Tests

No.	Theme	Issues / Comments	IFSB Response / Actions
17.	FIVE ELEMENTS OF EFFECTIVE STRESS-TESTING FRAMEWORK	<p>Many comments recommended revisions along the following lines:</p> <ul style="list-style-type: none"> • To consider requirement of skilled personnel • “identification of risk factors (such as capital, liquidity, ROR, DCR, credit, etc.) that need to be stressed” and “frequency of conducting stress testing on identified risk factors (e.g. monthly, semi-annually, annually, or ad-hoc)” • Stress scenarios should include a reference to different level of stress shock (mild, moderate, and extreme). • 	All suggestions were duly incorporated within the effective stress-testing framework.
18.	KEY ROLES FOR BOARD AND SENIOR MANAGEMENT	Some comments asked to highlight the expectation on the key roles of the Board and senior management in Stress Testing.	Paragraphs 21-30 in Section 2.1 discuss the roles of the Board and senior management.
19.	GOVERNANCE FRAMEWORK	Comments also asked to highlight the importance of robust governance framework to	Section 2.1 is fully dedicated to the governance framework of stress tests and paragraph 32 was

No.	Theme	Issues / Comments	IFSB Response / Actions
		be used as guidance in the implementation of stress tests.	revised to include RSA’s role in establishing a governance framework.
20.	ROLE OF RSAs	Some comments suggested that Islamic banks’ reliance on RSAs should be minimized in order to support the development of expertise in stress testing within IIFS.	<p>TN-2 added paragraph 32 in Section 2.1 to incorporate this feedback as follows:</p> <p><i>“RSAs must also have sufficient expertise to provide advice to IIFS in terms of their internal stress-testing exercises, as well as their remedial capital and liquidity adequacy measures, as and when needed based on the stress test results and assessments conducted by the RSA. The involvement of RSAs in IIFS’s stress testing should be proportionate to the size, nature, complexity and sophistication of IIFS’s risk profile and business activities. Regardless, IIFS must itself aim to develop internal expertise in stress testing and generally reduce reliance on RSAs.”</i></p>
21.	DATA REQUIREMENTS	Comments requested elaboration on the data requirement for stress testing Islamic banks.	TN-2 discussed set of data requirements in Section 2.2 and provided the suggested data requirement template in Appendix A1.
22.	DATA PROXIES	Comments suggested TN-2 should show how and what kind of data proxy would be needed by providing examples.	<p>TN-2 is not in position to recommend such as there are no established lists of proxies. In fact, this guidance will vary and has to be internally derived by the IIFS or provided jurisdiction-wide by the respective RSA. The key aspect behind a choice of proxy is it possesses similar risk characteristics. Hence, the following paragraph provides the guidelines to establish this data proxy:</p> <p><i>“... Where data is lacking or insufficient, both IIFS and RSAs need to explore relevant data proxies for stress tests. The proxies may be derived internally by an IIFS from other assets that possess similar risk characteristics, or externally through industry</i></p>

No.	Theme	Issues / Comments	IFSB Response / Actions
			<i>benchmarking. IIFS must document comprehensively relevant information regarding such proxies, including the characteristics, rationale for the use, source and any known limitations thereof ..."</i>
23.	DIFFERING RISK PROFILES OF ISLAMIC BANKS	Comments requested emphasis that the credit, market and operational risk profiles of Islamic banks' instruments are different from conventional instruments.	The risk specificities of IIFS are discussed in Section 3.2 including emphasising the difference in risk profiles between IIFS and conventional instruments.
24.	EXPERT PANELS	Comments requested for guidance on the formation and management of expert panels.	TN-2 added a suggested guidance for the same in paragraph 40.
25.	ASSET QUALITY REVIEW (AQR)	Comments requested that AQR should not be made mandatory to the stress testing framework since it is an ongoing process and often time consuming.	The paragraph in question was revised as follows: <i>"An AQR is a highly recommended exercise and typically precedes a stress test. If conducted, AQR-adjusted values should be the point of departure for the stress test; however the AQR report/findings itself need not necessarily be part of the stress test results report."</i>
26.	LOW-RISK PROFILE / SIMPLE-STRESS TESTS	Comments suggested terms which are subject to various interpretations such as "low risk-profile" banks and "simple stress-tests" should be deleted from TN-2.	Based on various comments which the IFSB had received, it had resolved to delete such terms from TN-2 and instead paragraph 57 in Section 2.6 was introduced as follows: <i>"An IIFS's stress-testing framework should be commensurate with the size, nature, complexity and sophistication of its risk profile and business activities. In general, a more sophisticated or complex IIFS should use a combination of sensitivity analysis and scenario tests (or any other appropriate concept) to capture all aspects of risks."</i>

Section III: Solvency Stress Tests

No.	Theme	Issues / Comments	IFSB Response / Actions
27.	STRESS-TESTING MODELS	Comments requested for elaboration on processes related to stress-testing designs and satellite modelling. Some also requested to discuss other types of models including rating migration approach, indirect nonlinear optional risk, etc. There were also comments asking for inclusion of Basel III aspects such as Countercyclical Buffer.	<p>Relevant stress test models are aptly discussed in Section 3.3 entitled 'Stress Designs and Satellite Models'.</p> <p>It is impossible for TN-2 to discuss all types of stress testing methodologies. Paragraph 63 of TN-2 was added as follows:</p> <p><i>"The proposed template provides some initial guidance on stress tests for RSAs and IIFS. Both are encouraged to explore, design and develop their own stress test(s) that are technically more advanced and appropriate for their economic and financial environment and jurisdiction complexity.</i></p>
28.	GUIDANCE ON CAR / RISK-WEIGHT ASSUMPTIONS	A number of comments requested elaborated guidance on capital adequacy ratio triggers, remedial plans, risk weight assumptions, etc. in TN-2.	<p>Paragraphs 81 and 82 were substantially revised to address such feedback.</p> <p>Footnote 32 was duly added in regard to the effect of shocks on risk-weighted assets (RWA) as follows:</p> <p><i>"In reality, different Sharīah-compliant contracts are likely to have different RWs ranging from as low as 5% to as high as 400% depending upon their economic substance, credit ratings (if applicable) and corresponding regulatory treatments. The impact on RWA will also vary should the perceived riskiness of the portfolios change in the light of the stress scenarios and economic shocks (see paragraph 82 of this TN-2). The various</i></p>

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			<p><i>assumptions made in the TN (including this 100% impact on RWA) are readily changeable by users by adjusting the numbers in the blue boxes in the respective Excel sheets.”</i></p> <p>In addition, the stress test excel sheet templates allow the assumptions to be readily changed by adjusting the numbers in the blue boxes; hence the assumption on RWAs can also be changed.</p>
29.	GUIDANCE ON HURDLE RATE	Some comments requested the rationale for using a hurdle rate of total capital ratio at 8% in TN-2.	<p>The CAR hurdle rate is not prescriptive at 8%. The TN made this issue clear in footnote 21 and footnote 23.</p> <p>Furthermore, footnote 27 was also added which reads:</p> <p><i>“This is an example hurdle rate for the sake of stress tests in TN-2 and is not prescriptive. See footnote 21.”</i></p>
30.	VALIDITY OF MODEL SPECIFICATIONS	Some comments suggested to use caution in phrasing of modelling and stress-testing results in Section 3.	<p>The results in the TN-2 are not prescriptive and merely to facilitate understanding and guidance on stress tests for IFSI. Hence, issues such as misspecification of model should not be at the forefront as they are mock and not intended to be used as definite numbers by RSAs and IIFS. Footnote 25 was added to reinforce this message:</p> <p><i>“The stress test models, shocks and scenarios in this TN-2 are not prescriptive; rather they are suggestive only to offer guidance and are not meant to be exhaustive to cover every aspect and dimensions of stress tests. RSAs and IIFS are encouraged to implement principles from this TN-2</i></p>

No.	Theme	Issues / Comments	IFSB Response / Actions
			<i>into their own appropriate stress test designs with shocks and scenarios built upon historical experiences and expert judgments most appropriate to their economic and financial environment and operational complexity.”</i>
31.	STANDARDISATION OF SHOCK IMPACTS	Comments suggested that different levels of shock within credit and market risk should demonstrate, at least three stress shocks: mild, moderate, and worst-case (extreme).	<p>In terms of the stress test templates, the different level of shocks are not defined separately – however, a stress tester can easily implement any of the three scenarios (baseline, mild, extreme) by simply adjusting the shock parameters in the blue boxes of the excel templates. Accordingly, footnote 34 was added as follows:</p> <p><i>“The various assumptions made in the TN are readily changeable by users by adjusting the numbers in the blue boxes in the respective Excel sheets. These could also be appropriately adjusted to capture the impact across different levels of shock scenarios (e.g. baseline, moderate, extreme).”</i></p>
32.	MACROECONOMIC SHOCK SCENARIO DESIGNS	Some comments recommended adding explanation on macroeconomic shock scenario designing process.	This explanation was added in paragraphs 74 and 75 of TN-2.
33.	TECHNICAL ASPECTS OF STRESS TESTING TEMPLATES	A number of feedback was provided to the technical specifications within the excel-based stress-testing templates.	All such feedback were duly incorporated in TN-2 Stress Testing Templates as well as corresponding areas in-text.
34.	MACROFINANCIAL LINKAGES WITH SHARIAH CONTRACTS	Comments asked for establishing macrofinancial linkages between macroeconomic variables and performance of financing by <i>Sharī’ah</i> contracts.	In Section 3.2, TN-2 covered the risk specificities of IIFS and why macroeconomic factors might affect different <i>Sharī’ah</i> -compliant contracts in a heterogeneous manner depending upon their economic substance. However, a practical study and results of this relationship is something which is

No.	Theme	Issues / Comments	IFSB Response / Actions
			best to be done by the RSAs as they have the actual data to conduct this study.
35.	ESTIMATIONS PROCESS	A number of comments stated there were no explanations provided on how different numbers used in establishing macrofinancial linkages between shock scenarios and non-performing financing of Islamic banks were generated.	<p>The principle on how the numbers of NPFs are to be derived in IFSI is no different from how NPLs are modelled in conventional finance. It could be estimated based on past historical data and using econometrics, or could be derived using expert judgments. Section 3.3 comprehensively discusses this issue.</p> <p>With regards to the numbers in tables 1 to 6, it is made clear upfront through footnote 25 that the dataset is hypothetical and what follows are assumed/indicative numbers. Furthermore, these numbers are not to be taken as prescriptive. The fact that there is an absence of publicly-available real IFSI and IIFS data, actual modelling and estimations are not feasibly done for TN-2. Hence, the numbers are not to be taken on absolute terms. Instead, the concept and principles are to be understood and then appropriately implemented by the various RSAs and IIFS in their own stress tests. This factor is aptly discussed in paragraph 63 as well as footnote 25 in TN-2.</p>
36.	USE OF ALPHA / STRESSED ALPHA	A number of comments were directed to UPSIA accounts and presence of PER/IRR in Islamic banks. Also, the role of alpha in capital adequacy and its relation to stress-testing as well as the concept of “stressed alpha” during shock periods.	<p>UPSIA are covered in Credit Shock 3 and Market Shock 4 through the use of regulatory alpha. The accompanying paragraphs and footnotes to these two shocks provided detailed discussions. UPSIA are also covered in detail from a liquidity perspective in Section 4.</p> <p>The alpha factor of 0.5 currently is suggestive and the RSAs need to correctly assess what applies in</p>

No.	Theme	Issues / Comments	IFSB Response / Actions
			<p>their jurisdiction. Footnote 38 in TN-2 fully expands upon this issue.</p> <p>The concept of a stressed alpha is also introduced and explained in footnote 39.</p>
37.	SCENARIO ANALYSIS ASSUMPTIONS	Comments requested to provided clarity on the scenario analysis stress-testing assumptions in TN.2	Footnote 64 was duly added to serve this purpose.
38.	USER GUIDE	Some comments suggested IFSB to provide a User Guide - to guide the usage of the Stress Testing Templates in TN-2.	This suggestion was discussed and agreed by the IFSB Council, which has been included in the IFSB Work Plan for 2017. The Secretariat will produce and release the User Guide on the IFSB website, after the approval of the Technical Committee in due course.

Section IV: Liquidity Stress Tests

No.	Theme	Issues / Comments	IFSB Response / Actions
39.	LIQUIDITY RISK DEFINITION	Comments requested for clarity on an appropriate definition and coverage of liquidity risk.	TN-2 added appropriate definitions on such, taking direct verbatim from IFSB-12 Guiding Principles on Liquidity Risk Management.
40.	LIQUIDITY RISK CHALLENGES FOR IIFS	Comments requested to detail out some of the challenges faced by IIFS in liquidity risk management.	Paragraphs 169 to 171 were duly added in Section 4 to address these comments.

No.	Theme	Issues / Comments	IFSB Response / Actions
41.	CENTRAL BANK LIQUIDITY PROVISIONS	Comments requested for revisiting an acknowledgement of non-established central bank liquidity provisions in TN-2 as risk mitigants for liquidity stress run off factors. Instead, it is proposed to consider only previously “established Sharīah-compliant central bank liquidity provisions” so as avoid moral hazard by reliance on central banks.	This was agreed and accordingly revised in TN-2.
42.	LIQUIDITY STRESS TEST ASSUMPTIONS	A number of suggestions were provided for the assumptions in liquidity stress testing template.	The liquidity stress test template is accompanied with an assumptions page in tab 3 where the coloured boxes readily allow the stress tester to change the input assumptions i.e. withdrawal of funding by various types of customers - either by 10%, 15%, 30%, etc. Hence, this is easily doable and the liquidity stress tests across the template will automatically adjust.
43.	RUN-OFF FACTORS FOR RPSIA	Comments suggested significant reduction of profit was not enough to deter RPSIA holders from redeeming their placements if they believe they will incur losses by keeping their placements. Therefore, without redemption conditions that strictly limit IAH’s redemption rights, the whole amount of RPSIA should be applied with the applicable run-off factors.	The approach in TN-2 is consistent with GN-6 and Basel III LCR. To reinforce and provide clarity, footnote 78 has been added.
44.	RUN-OFF FACTORS FOR TERM DEPOSITS/UPSIA	Comments suggested the run-off rates for UPSIA and Term Deposits be segregated as in some countries UPSIA are loss-absorbing while term deposits are capital guaranteed, protected by deposit insurance, etc.	TN-2 modified the assumptions page in the liquidity risk excel sheet to segregate the expected outflow rates for term deposits and UPSIA. A weighted average of the withdrawal rates from these two can then be inserted into the stress test modules. Hence, Cell B23 and D23 should be weighted

No.	Theme	Issues / Comments	IFSB Response / Actions
			averages of the individual run-off rates of term deposits and UPSIA.
45.	LIQUIDITY STRESS TEST MODULES (ICFA, LCR, MMA, NSFR)	Comments inquired whether TN-2 was prescribing all four modules in TN-2 (ICFA, LCR, MMA, NSFR) to be used for analysing the liquidity position of IIFS and/or the Islamic banking system under stress scenarios.	<p>The objectives and comparisons of the four modules are provided in paragraph 175 and in paragraphs 177-179 in Section 4.2.</p> <p>Paragraph 176 also adds:</p> <p><i>“The decision on which modules are necessary to be applied by IIFS for liquidity stress tests depends upon the local regulations; e.g. LCR and NSFR have begun to be implemented in some jurisdictions that have already adopted Basel III / IFSB-15 / GN-6.”</i></p>

Section V: Recent Developments in Stress Tests

No.	Theme	Issues / Comments	IFSB Response / Actions
46.	PRACTICAL ILLUSTRATIONS	Comments suggested that in addition to the theoretical discussions on recent developments in stress tests, some practical illustrations should also be given.	<p>Integrated, network contagion and second-round effects stress tests are very recent developments which are not the objective of this TN-2. Section 5 highlights the relevant aspects and developments in this area, but as is evident from paragraph 220, the current models that attempt to simulate integrated stress tests are very limited.</p> <p>Also as paragraph 222 notes, this development is a work in progress even in the conventional industry.</p>

Appendices

No.	Theme	Issues / Comments	IFSB Response / Actions
47.	DATA TEMPLATE	Some comments suggested the data collection template will differ for investment banks.	TN-2 stress tests are more geared towards commercial Islamic banks and certainly investment banks may fine tune the principles and recommendations in TN-2 accordingly to suit their needs.
48.	SUGGESTED ADDITONS TO DATA TEMPLATE	Some comments recommended adding variables such as average industry NPFs, oil prices, commodity prices, into the list.	All appropriate suggested variables were added in Table 10.

THANK YOU

The IFSB wishes to express its gratitude to all parties who had responded to the Exposure Draft of IFSB-19 with comments and feedback during the Public Consultation period.



TN-2: TECHNICAL NOTE ON STRESS TESTING FOR INSTITUTIONS OFFERING ISLAMIC FINANCIAL SERVICES (IIFS)

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