December 6, 2022

Ran Daniel Chief Financial Officer Nano-X Imaging Ltd. Communication Center Neve Ilan , Israel 9085000

Re: Nano-X Imaging Ltd.

Form 20-F for

Fiscal Year Ended December 31, 2021

Filed May 2, 2022 Form 6-K Filed

March 31, 2022

File No. 001-39461

Dear Ran Daniel:

We have reviewed your filing and have the following comments. In some of our

comments, we may ask you to provide us with information so we may better understand your

disclosure.

Please respond to these comments within ten business days by providing the requested

information or advise us as soon as possible when you will respond. If you do not believe our

comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 20-F for Fiscal Year Ended December 31, 2021

Item 5. Operating and Financial Review and Prospects A. Operating Results Results of Operations, page 82

Please expand your discussion and analysis of cost of revenue to explain why the amount recognized for the AI segment significantly exceeds the amount of revenue recognized. 2. We note that you attribute the increase in general and administrative expenses to (a) the merger with Zebra and the acquisitions of USARAD and MDWEB and (b) increased headcount due to the expansion of your management team and overall organization

infrastructure. When multiple factors impact the change in your results of operations,

quantify the extent to

which each factor impacted the corresponding line items. Refer to

Item 303(b)(2) of

Regulation S-K for guidance.

Ran Daniel

FirstName LastNameRan Daniel

Nano-X Imaging Ltd.

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December NameNano-X

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FirstName LastName

E. Critical Accounting Estimates, page 90

The disclosures you have provided for each of your identified critical estimates appear to

provide investors with a discussion as to how you are accounting for these items in

accordance with US GAAP and are similar to your significant accounting policies

disclosures rather than providing investors with an understanding as to what the critical

estimates being made are and how the uncertainty associated with those estimates may impact your consolidated financial statements. Please revise the disclosures for each of your critical estimates made in preparing your consolidated financial statements to comply with the guidance in Section 501.14 of the Financial Reporting Codification. Ensure your disclosures sufficiently explain to investors what each critical estimate is; the uncertainties associated with the critical estimates; the methods and assumptions used to make the critical estimates, including an explanation as to how you arrived at the assumptions used; the events or transactions that could materially impact the assumptions made; and how reasonably likely changes to those assumptions could impact your consolidated financial statements. Provide investors with quantified information to the extent meaningful and available. Goodwill, page 91 We note that \$51.2 million of the \$58.3 million in goodwill as of December 31, 2021 was generated from the acquisition of Zebra Medical Vision Ltd. on November 4, 2021. We further note that the related segment, AI Solutions, has recognized minimal revenues and generated gross and operating losses. As such, please ensure your disclosures address each of the following: The percentage by which the estimated fair value of your reporting units exceed the carrying value. The methodologies used to estimate the fair value of the reporting units, including the material judgments, assumptions and estimates. A discussion of the degree of uncertainty associated with the key assumptions and the potential impact changes in the key assumptions would have on your impairment analysis. A discussion of the potential events and/or changes in circumstances that could reasonably be expected to occur and negatively affect the key assumptions and result in a material impairment charge. Refer to Item303(b)(3) of Regulation S-K and Section 501.14 of the Financial Reporting Codification for guidance. Item 15. Controls and Procedures, page 129 We note your auditor has included the following material weakness, did not design and maintain effective internal controls over certain information) general technology (IT controls for applications used in the preparation of the Company consolidated financial However, your disclosure of the material weaknesses did statements. not include this Ran Daniel FirstName LastNameRan Daniel Nano-X Imaging Ltd. Comapany6, December NameNano-X Imaging Ltd. 2022 December Page 3 6, 2022 Page 3 FirstName LastName item. Please advise. In this regard, we note one of your remediation efforts is to implement a new ERP system. Note 2 - Significant Accounting Policies h. Intangible Assets, net Goodwill, page F-11

 Please expand your accounting policy to disclose the date you are testing goodwill for impairment and to clarify the level at which you are testing goodwill for impairment (i.e., at the operating segment level or at a component of your operating segments level). Refer

to ASC 350-20-35-28 and ASC 350-20-35-33 through 35-38 for guidance.

1. Revenue Recognition, page F-13

7. Please expand your accounting policy to specifically address the following:

The disclosure requirements in ASC 606-10-50-12 and 50-18 through 50-19. In this

regard, it is unclear when your performance obligations for your radiology services

 $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

 $\,$ the significant payment terms are; and the nature of the services you have promised

 $\,$ to provide, including whether you are acting as the principal or agent in the $\,$

transactions.

The disclosure requirements in ASC 606-10-50-17 and 50-20 ne

regarding the

transaction price and whether there is any variable consideration.

Please provide the disclosures regarding by ASC 606-10-50 for the

revenues recognized related to your AI Solutions, which represented approximately 23% of

total revenue

recognized.

q. Fair value measurement, page F-15

9. Please provide the disclosures required by ASC 820-10-50-2 for your contingent short

term and long term earnout liabilities as of December 31, 2021.

Note 3 - Business Combination and Other Transaction, page F-18

10. Please expand your disclosures for the acquisition of Zebra Medical Vision Ltd. to

 $\,$ provide a discussion of the methodologies and material estimates and assumptions used to

estimate the fair value of the Image Big Data intangible asset in addition to the Developed

Technology intangible asset. Also provide a discussion of the facts and circumstances

that lead you to conclude both intangible assets have a useful life of 10 years.

Note 4 - Goodwill & Intangible Assets, Net, page F-23

11. Please expand your disclosures to provide the information required for your goodwill

activity and balances at the segment level in accordance with ASC 350-20-50-1.

Ran Daniel

Nano-X Imaging Ltd.

December 6, 2022

Page 4

Note 11 - Commitments and Contingencies, page F-30

12. We note your disclosures for three legal proceedings in addition to the SEC investigation.

Please expand your disclosures to state the amount or range of reasonably possible loss in

the aggregate, or that you are unable to reasonably estimate the amount or range. Please $\,$

note that ASC 450-20-50-4 does not require the amount or range of reasonably possible $\,$

loss to be estimated with precision or certainty.

Note 14 - Segments of Operations, page F-40

13. Please expand your disclosure to include the amount of total assets by reportable segment

in accordance with ASC 280-10-50-22. In this regard, we note that you disclose the $\,$

amount of depreciation and amortization expense by reportable segment. Form 6-K Filed March 31, 2022

Exhibit 99.1, page 1

14. We note your presentation of non-GAAP financial measures without and/or prior to the

 $\dot{}$ presentation of the most comparable US GAAP financial measure. Specifically, refer to

your presentation of (a) non-GAAP gross profit on page 1; and (b)

non-GAAP cost of

revenue on page 2; (c) non-GAAP gross margin on page 2; and (d) non-GAAP basic and

diluted loss per share on page 9. Please comply with Item 10(e)(1)(i)(a) of Regulation S-

K and Question 102.10 of the Non-GAAP Compliance and Disclosure Interpretations by

presenting and/or discussing the most directly comparable US GAAP financial measure

with equal or greater prominence.

Please provide a reconciliation of non-GAAP gross profit/(loss) and 15. non-GAAP gross

margin from US GAAP gross loss and US GAAP gross margin in accordance with Item

10(e)(1)(i)(b) of Regulation S-K.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Tracey Houser at 202-551-3736 or Terence O'Brien at 202-551-3355, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

FirstName LastNameRan Daniel Division of

Corporation Finance

Comapany NameNano-X Imaging Ltd. Office of Industrial Applications and Services

December 6, 2022 Page 4 FirstName LastName